UNITED STATES BANKRUPTCY COURT
FOR THE WESTERN DISTRICT OF NORTH CAROLINA
CHARLOTTE DIVISION

IN RE:	)	
	)	
GARLOCK SEALING TECHNOLOGIES LLC, et al,	)	No. 10-BK-31607
	)	
Debtors.	)	VOLUME X
	)	FULL DAY SESSION

TRANSCRIPT OF ESTIMATION TRIAL
BEFORE THE HONORABLE GEORGE R. HODGES
UNITED STATES BANKRUPTCY JUDGE
AUGUST 2, 2013

APPEARANCES:

On Behalf of Debtors:

GARLAND S. CASSADA, ESQ.
Robinson Bradshaw & Hinson, PA
101 North Tryon Street, Suite 1900
Charlotte, North Carolina 28246

JONATHAN C. KRISKO, ESQ.
Robinson Bradshaw & Hinson PA
101 North Tryon Street, Suite 1900
Charlotte, North Carolina 28246

LOUIS ADAM BLEDSOE, III, ESQ.
Robinson Bradshaw & Hinson PA
101 North Tryon Street, Suite 1900
Charlotte, North Carolina 28246

RICHARD C. WORF, ESQ.
Robinson Bradshaw & Hinson, PA
101 North Tryon Street, Suite 1900
Charlotte, North Carolina 28246

APPEARANCES (Continued):

On Behalf of the Debtors:

RAY HARRIS, ESQ.
Schachter Harris, LLP
400 East Las Colinas Blvd.
Irving, Texas 75039

CARY SCHACHTER, ESQ.
Schachter Harris, LLP
400 East Las Colinas Blvd.
Irving, Texas 75039

C. RICHARD RAYBURN, JR., ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

SHELLEY KOON ABEL, ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

ALBERT F. DURHAM, ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

ROSS ROBERT FULTON, ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

JOHN R. MILLER, JR., ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

ASHLEY K. NEAL, ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

WILLIAM SAMUEL SMOAK, JR., ESQ.
Rayburn Cooper & Durham, PA
227 West Trade Street, Suite 1200
Charlotte, North Carolina 28202

APPEARANCES (Continued.):

On Behalf of Interested Parties:

Carson Protwall LP:

JULIE BARKER PAPE, ESQ.
Womble Carlyle Sandridge & Rice, PLLC
P.O. Drawer 84
Winston-Salem, North Carolina 27102

Coltec Industries Inc.:

DANIEL GRAY CLODFELTER, ESQ.
Moore & Van Allen, PLLC
100 North Tryon Street, Suite 4700
Charlotte, North Carolina 28202-4003

HILLARY B. CRABTREE, ESQ.
Moore & Van Allen, PLLC
100 North Tryon Street, Suite 4700
Charlotte, North Carolina 28202-4003

MARK A. NEBRIG, ESQ.
Moore & Van Allen, PLLC
100 North Tryon Street, Suite 4700
Charlotte, North Carolina 28202-4003

EDWARD TAYLOR STUKES, ESQ.
Moore & Van Allen, PLLC
100 North Tryon Street, Suite 4700
Charlotte, North Carolina 28202-4003

Creditor Committees:

Official Committee of Asbestos Personal Injury Claimants:

LESLIE M. KELLEHER, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

JEANNA RICKARDS KOSKI, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

APPEARANCES (Continued.):

Official Committee of Asbestos Personal Injury Claimaints:

JEFFREY A. LIESEMER, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

KEVIN C. MACLAY, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

TODD E. PHILLIPS, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

TREVOR W. SWETT, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

JAMES P. WEHNER, ESQ.
Caplin & Drysdale, Chartered
One Thomas Circle NW, Suite 1100
Washington, DC 20005

ELIHU INSELBUCH, ESQ.
Caplin & Drysdale, Chartered
600 Lexington Avenue, 21st Floor
New York, New York 10022

NATHAN D. FINCH, ESQ.
Motley Rice, LLC
1000 Potomac Street, NW, Suite 150
Washington, DC 20007

GLENN C. THOMPSON, ESQ.
Hamilton Stephens Steele & Martin
201 South College Street, Suite 2020
Charlotte, North Carolina 28244-2020

TRAVIS W. MOON, ESQ.
Moon Wright & Houston, PLLC
227 West Trade Street, Suite 1800
Charlotte, North Carolina 28202

APPEARANCES (Continued.):

Official Committee of Asbestos Personal Injury Claimaints:

RICHARD S. WRIGHT, ESQ.
Moon Wright & Houston, PLLC
226 West Trade Street, Suite 1800
Charlotte, North Carolina 28202

ANDREW T. HOUSTON, ESQ.
Moon Wright & Houston, PLLC
227 West Trade Street, Suite 1800
Charlotte, North Carolina 28202

SCOTT L. FROST, ESQ.
Waters Kraus, LLP
222 North Sepulveda Boulevard, Suite 1900
El Segundo, California 90245

JONATHAN A. GEORGE, ESQ.
Waters Kraus, LLP
3219 McKinney Avenue
Dallas, Texas 75204

Future Asbestos Claimaints:

KATHLEEN A. ORR, ESQ.
Orrick, Herrington & Sutcliffe, LLP
1152 15th Street, N.W., Columbia Center
Washington, DC 20005-1706

JONATHAN P. GUY, ESQ.
Orrick, Herrington & Sutcliffe, LLP
1152 15th Street, N.W., Columbia Center
Washington, DC 20005-1706

Official Committee of Unsecured Creditors:

DEBORAH L. FLETCHER, ESQ.
FSB Fisher Broyles, LLP
6000 Fairview Road, Suite 1200
Charlotte, North Carolina 28210

I N D E X

* * * * * *

E X H I B I T S

* * * * * *

P R O C E E D I N G S

AUGUST 2, 2013, COURT CALLED TO ORDER 9:30 A.M.:

MR. GUY: Your Honor, I have a quick housekeeping item.

THE COURT: Yes.

MR. GUY: I know that your mind is open on the issue as to whether we need more time. The reason I would ask that we try to get an answer on that maybe at the end of today is because if there's the possibility of more time, more time will be taken in the following week so that we'll need it.

And the problem we have, Your Honor, is that we have throughout this case been presenting our case on the presumption that we have to fit it within the time allotted by the Court.

THE COURT: I'm hopeful that's what we'll be able to do. If we have more time, we're talking about one more day. We don't have any more time, really, other than we do have Monday, but that's the only time we can find a place to do anything, so.

MR. GUY: Thank you, Your Honor.

THE COURT: And in fact, we don't really have Monday. I've got other stuff scheduled on Monday, but it's -- may be possible to move it.

MR. GUY: With the right will, it can be done, Your Honor.

THE COURT: I hope we can do it, and we'll try to do it. But let's see where we are at the end of the day. Then we'll maybe know a bit more about that.

MR. GUY: Thank you, Your Honor.

MR. WORF: Good morning, Your Honor.

THE COURT: Good morning.

MR. WORF: Today we get to the Debtor's estimation experts. The debtors call Dr. Jorge Gallardo-Garcia.

THE COURT: Okay.

JORGE RAUL GALLARDO-GARCIA,

Being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. WORF:

Q. Good morning, Dr. Gallardo-Garcia.

A. Good morning.

Q. Can you please state your name for the record?

A. My name is Jorge Raul Gallardo-Garcia.

Q. Could you please describe your education for the court?

A. Yes. I hold a Ph.D in economics from the University of Pennsylvania. I also have a Master's in economics from the same university. Also I'm originally from Mexico. I was born and raised in Mexico City, and I have studies from the Instituto of Technologico Autonomo De Mexico. I have a Master's in economics, Bachelor's degree in economics, and a Bachelor's degree in business administration.

Q. And you have prepared these slides to help illustrate your testimony today?
A. Yes, I did.
Q. What is your current position?
A. I'm manager at Bates White, LLC.
Q. And you work in Washington, DC?
A. Yes.
Q. What would you describe as your specialty?
A. Well, my specialties both in general economics, it's basically modeling human or individual behavior through economic models. And then the estimation of those economic models, using individual level data. My research has been done on those topics.
Q. We heard from Mr. Swett in opening argument that it is somehow illegitimate or ill-advised to look at data about individuals when you're performing an aggregate estimation. As an economist and econometrician, do you agree with that?
A. No. I think that's exactly -- it's quite the contrary.

When one is trying to model individual behavior, or one is trying to do an aggregate forecast of any kind, if you have available disaggregated data, there's no reason to lose or to disregard all the detail in the data to come to an aggregate answer.

You can always model the individual's decisions and the individual decisions related to economics and develop economic

models, based on individual data, and then transport those decisions or those estimates to the aggregate population.

Q. Do you have an example of that from the policy arena, where that is done?

A. Yes. So, for example, when one wants to do some type of policy, one wants to test a policy. For example, such as a social program in a given town or something. So as I have on my research -- on my past research, for example, in the first two papers, what we were doing is, we were evaluating a program in which families or parents of children will get some amount of money, if they want -- if they sent their children to school, and if they took their children to a health clinic.

Now this program was a huge program. It was to serve more than 5 million families. And it was a type of program that was being tested to be applied in the whole country. This is -- all of this is in Mexico. But since then, this program has been applied in all of Latin America and some places in the U.S. are applying this same model. But the point of the program was to see if children will benefit from the government paying their parents to send them to school.

So what we did in these two papers was to basically measure what was the benefit of the children of the parents getting that money in terms of number of years of education, attrition rates from going to school. There was a section on grades, et cetera.

So the point was, that by aggregate, if you -- if we have aggregated the data, and tried to measure the impact of the program, we will have lost the detail of who the impact was going to -- in which type of the -- in which subpopulation the impact was going to be stronger.

So by doing an analysis using disaggregated data, we were able to know what were the target populations and who benefited from the program the most, versus the populations that will not benefit as much by the program.

And that was only possible because this was a study that could be done with the disaggregated data, at the individual level, as we have in the Garlock analytical database that we are going to talk about later.

Q. So by disaggregated data, just to be clear, you're talking about data on the 5 million individuals who were participants in the program?

A. This was a sample of those 5 million, but it was thousands of people -- well, thousands of families that have at the same time, thousands of children. And we had data on the children and on the families' characteristics.

Q. Now, you were a co-author of the two papers that are listed on the slide entitled, "Research Articles"?

A. Yes. The first -- the top publication, that's just a publication which is a result of our study that was published in the Education Economics, which is a peer-reviewed journal.

The second paper, or the second study, is the report that the team that I was working, submitted to the Mexican Congress when they were trying to evaluate whether this program was going to be continued or not. So this was using the 2004 data. We did that study probably in 2005 -- or yeah, probably in 2005, and to this day the program continues in Mexico.

Q. And what is the third paper that you have listed on your slide?

A. The third paper is my dissertation. It was similar -- similar to the other two publications in that I was measuring what was the impact on children from their parents having health insurance.

And in this paper, the health insurance -- whether parents have health insurance or not, depended on whether they were working on a formal employment.

So what I was measuring was the decision of the parents to go to the job market to get one or another type of job, and then to -- the decision of having children or not.

And the outcomes that I was measuring were the infant mortality and the birth weight.

Q. Did these research articles all involve the collection and manipulation of large amounts of data?

A. Yes. All of them have to do with thousands of families and thousands of pieces of data.

Q. Are you also familiar with databases pertaining to

asbestos claims?
A. Yes. Since I started working at Bates White in 2006, I've been involved with work related to asbestos-related claims data analysis.

I have had experience in terms of litigation in cases like ASARCO Plant Insulation and NARCO. I've also had experience in other litigation cases regarding insurance coverage. We've also -- I have also participated in cases in -- from the consulting side, due diligence for the specific companies. And then on financial reporting for SEC filings related to asbestos expenditures, and examples of those are Garlock before 2010, Goodyear, John Crane, Maremont and Rockwell.
Q. Does Bates White also maintain internal databases that it uses for its financial reporting and other asbestos claim-related work?
A. Yes. We have several databases that we use for both general research and for the -- to aid in the analysis that we perform for our litigation and consulting.

We have, for example, a database that we call the master claims database, which is a database that lists all the claims that we know have been filed -- all the asbestos claims that we know have been filed in the tort system.

We also have a database that we call the namings database, which lists the -- for some of those claims that we

have in the master database, lists all of the defendants that have been named by these claimants in their complaints.

We have a verdicts database which is a list of all the verdicts that we've been able to know of from public sources such as Mealey's and other asbestos-related publications.

We have a products database which is a list of asbestos defendants -- or companies that handle asbestos, and the types of products they handle. That's basically it.

Q. Do you have a role in creating and maintaining these internal databases?

A. Yes. I participated in the design and the collection of the data, and now I'm in charge of the management of those databases.

MR. WORF: Your Honor, we proffer Dr. Gallardo-Garcia as an expert in statistical analysis, economic modeling and the construction of databases for those tasks, including asbestos claim databases.

MR. GUY: Your Honor, I have a brief voir dire.

THE COURT: All right.

VOIR DIRE EXAMINATION

BY MR. GUY:

Q. Good morning, Dr. Gallardo-Garcia.

A. Good morning.

Q. Jonathan Guy for the FCR. You do publish peer-reviewed articles, correct?

A. Yes, I published one.
Q. We can pull back on the screen.
Do either of those articles have anything to do with asbestos?
A. No.
Q. Have you ever been accepted by a court as an expert witness?
A. No.
Q. What you're going to testify about today, which I understand is from your initial report, concerns the database that was compiled by Bates White for preparing Dr. Bates' report, right?
A. Correct.
Q. Is there anything you're going to talk about that Dr. Bates couldn't adequately cover himself?
A. Well, I know the details of how the database was constructed, all the processes that we followed when constructing the data, the sources of data. I know all the detail.
Q. So what you're going to talk about is what you did in preparing the database?
A. Well, I'm going to talk about what were the -- what were the sources of data that were available to us for constructing this database; what were the processes that we followed in putting together the data; what were the quality control

processes. And I'm going to testify as to the robustness and the reliability of the data.

Q. So most of what you're going to talk about is what you actually did in compiling the database, right?

A. Well, not only what I actually did, but also the work that I directed, and all that based on the experience that I have in managing and creating these types of databases.

MR. GUY: Your Honor, I have no further questions.

We reserve on the issue as to whether this witness is here testifying as a fact witness or as an expert witness.

Thank you, Your Honor.

THE COURT: We'll admit him as an expert in the areas mentioned and let you proceed.

MR. WORF: Thank you, Your Honor.

CONTINUED DIRECT EXAMINATION

BY MR. WORF:

Q. Dr. Gallardo-Garcia, let's move on to your work in this case.

What was Bates White engaged to do in this case?

A. Well, the main charge was the estimate of Garlock's asbestos liabilities as Dr. Bates defined it in his report.

Q. Did the work that Dr. Bates performed require the collection and analysis of large amounts of data about individual claimants?

A. Yes. For his analysis we put -- we constructed the

analytical database that has the information that he used for his calculations.

Q. Were you responsible for supervising the construction of the database that Dr. Bates used for performing his work?

A. Yes, I was.

Q. Did Dr. Bates give you instructions on the information that that database needed to contain in order to perform his calculations?

A. Yes. So Dr. Bates and I would discuss what was the information available in terms of the sources of information, the type of information that was available, for example, from the questionnaires or other discovery in the case. And based on the model that he had developed, we -- I constructed the database and pulled the information most relevant for his model to test and estimate his model.

Q. In your expert opinion, does the Garlock analytical database, as you've called the product of your work, meet the statistical standards of reliability for the work that Dr. Bates performed in this case?

A. I think it does. It actually exceeds them in terms of when compared to other research databases, the quality control processes that we implemented when constructing the database, and when reviewing that the data was properly collected and was properly standardized, were far more strict than what I've seen in the construction -- while in the construction of a

database of this size.
Q. Does that mean there are no errors in the database?
A. No. There are certainly errors in the database. A database of this size and this scope and the number of data sources that exist -- that we used for constructing it, it's certain that it's going to have some errors. Having a perfect database would be practically impossible, given the size of the database.

Now the errors that remain, I know are not statistically insignificant, because of all the quality control processes that we've implemented when constructing the data. We reviewed the data collected. We checked that the data collected matched to the underlying data sources. We -- we went through a lot of work to ensure that the data was going to be as robust as possible.
Q. Could you give the court some idea of how big this database is?
A. Well, the initial database, what we call the Garrison database has about a little less than 700,000 records -- or 700,000 claims, of which about 26,000 are mesotheliomas.

The data that we put together, that we compiled and we eventually included in the Garlock database in terms for example of exposure histories or job histories, it's about 1. -- 1.7 million records for those 26,000 individuals. Not all individuals have records in the exposure data -- in the

exposure table, but it's just a measure of the size of the data.

Then we also have another table that has the other parties in those individuals cases, and there are about 480,000 records in these -- in that table.

Q. Let's talk about the contents of the Garlock analytical database in a little more detail.

Does this slide entitled, "Main Data Components of Garlock Analytical Database" summarize the major categories of information that are in the Garlock analytical database?

A. Yes, it does.

Q. Could you briefly describe these components?

A. Yes. So the basis for the data is the list of claimants. That filed a claim against Garlock. And this list of claimants comes from the Garrison database. So as I was saying, because we focused on the mesothelioma cases, we have about 26,000 -- a little more than 26,000 claimants in this database.

Now, to the data that has to do with -- that was in the Garrison database, through discovery and other publicly available sources, we added information about exposures in terms of job, and exposure histories for a number of these claimants. Also information about their claims that these claimants have filed against other parties, other tort defendants. And we also have information in terms of verdicts, both Garlock verdicts, and verdicts that happened in

the tort system but in which Garlock was not a defendant or was not present at trial.

Q. So it's correct that the Garrison claims database was the foundation for the Garlock analytical database?

A. Yes, it was. The Garrison claims database gave us the list of claimants and information about those claimants and claims characteristics.

Q. What's the basic information that was contained in the Garrison claims database?

A. Well, the names of the claimants, for a number of them their social security numbers, some demographic information, such as birth date and death date, diagnosis date, the type of disease that they alleged.

And then in terms of the claims -- claim characteristics, when the claim was filed, in which state, or which was the representing law firm, the status of the claim. And if the claim was resolved, the resolution dates. And if the claim had received a settlement, the settlement amount.

Q. What version of the Garrison database did Bates White use for the Garlock analytical database?

A. Well, we received three versions during the course of this case, the -- we used the most recent version, which is the May 18, 2011. Although we compare this version -- this last version to the prior versions, to ensure if there were any updates to the data, we understood what the updates were.

And that we were actually using the best of the versions of the Garrison database.

Q. Did Bates White change anything in the Garlock database?

A. No. We didn't change the -- so the Garrison database is just an input to the Garlock analytical database. The Garrison database remains as we received it. What we did is to supplement the Garrison database with the additional information that we received in this case. Mainly from discovery, but also from other sources.

Q. Now, before the petition, you were familiar with the Garrison claims database, previous versions of the one that was used here through your financial reporting work for Garlock's parent company EnPro?

A. Yes. In about 2007 I started working on the work related to the SEC filings from -- by EnPro with respect to Garlock's asbestos claims.

Q. Why was the Garrison database not sufficient for Bates White's econometric work in this case?

A. Well, it's for two main reasons. The first reason is that we were -- well, when working on the financial reporting, we were measuring something completely different to what Dr. Bates is trying to measure -- is measuring in this case. So the tasks were completely different.

Second, a significant amount of information -- actually all of the information that was provided in -- or most of the

information that was provided in discovery, was not available to Garlock when we were working on the financial report, initially. So it wasn't something that we could -- we could use.

Q. Now, these orange boxes on this slide, they depict general categories of information that the Garlock analytical database has that the Garrison claims database does not?

A. Right. A significant amount of this information is something that was not included in the Garrison database to start with.

Q. Let's go through these one by one.

What information about claimant exposures are in the Garlock analytical database that was not in the Garrison database?

A. Well, in the Garrison database, there was a field called "occupation", at least one of the claimant's occupations. Now we know that these claimants usually have multiple occupations, and also that they worked at multiple different places in multiple different dates.

So through the discovery that we saw in this case we -- there was data available on the nature of Garlock exposure in terms of how individuals were exposed to Garlock -- Garlock's asbestos products, complete history in terms of their occupation, their job history and their exposure history in terms of occupation to industries, dates of those occupations,

the locations of those occupations. And for a subset of the claimants, we also have information about the other asbestos-containing products that were not Garlock's to which those individuals were exposed.

Q. What about claims against other parties? What information about that is in the Garlock analytical database, that was not in the Garrison database?

A. Well, the Garrison database did not have information about other parties. All the claims were filed against Garlock. There was some indication that some of the claims have been also filed against Anchor (phonetic) for example, but there was no information about the other parties.

Through the PIQ, the questionnaire and other sources, we were able to supplement the sources by adding the name of defendants, and other defendants that were named on the claimant's complaints, the status of their claim with respect to these defendants. Against which trusts they filed claims and what's the status of those trust claims. For a subset of the questionnaire claims, we have information about the tort and trust recoveries, in terms of how much money they've received from these two types of parties in the tort system. And also information about ballots cast in other bankruptcies.

Q. You described information relating to claims that are pending against Garlock. Is there information of this nature

about claims that were resolved as well?
A. Yes. Some of this information is available from public sources. Not the information that was granted in discovery, that information was not available for those. I think that we are going to talk about those specific documents later.
Q. Let's talk about verdicts. What information about verdicts is in the Garlock analytical database that was not in Garrison database?
A. Well, the Garrison database did not identify which cases had gone to verdict. It was in the Garrison database, it only listed the claimants, and the fact that those cases have been resolved, and there has been a payment for those claimants, but didn't identify them as whether those were settlements or actual verdicts, and a similar issue was the case for the defense verdicts.

So we -- through additional documentation that we received from Garlock, we were able to locate those claimants in the Garrison database and identify them as verdicts, and also other additional information in terms of outcomes and verdict dates, for example.

Also for other mesothelioma defendants and verdicts, we added information about other cases that have resulted in verdict, and information about the outcomes in terms of whether they were defense or plaintiff verdicts, the amounts

that those cases were awarded, and the dates in which these cases happened.

Q. In addition to the three major categories we discussed, is there any additional information in the Garlock analytical database that was not in the Garrison claims database?

A. Yes. There were a few places, a few fields that we were able to supplement with publicly available information to help in the analysis and also to make the database more robust.

For example, a number of individuals in the database did not have a birthdate or a death date, and we used a file called the master death file from the Social Security Administration to supplement those dates.

So this file is just a list of all the social security numbers of people who have died. And it has some basic characteristics, like the person's name, his or her birthdate, death date, and the last place of residence.

Also we supplemented the database with information that we -- when not available from any other source, with information from the -- a copy of the Manville trust database that we have with claims filed against this trust through 2002.

We also have a copy of the claims -- Center for Claims Resolution or CCR with claims through 2001, that also have information about -- sometimes about claimants, in terms of dates, also in terms of occupations and places of exposure.

And -- well, that's basically it.

Q. Does this slide entitled "Summary of Claimant and Claim Information" in the Garlock analytical database, summarize the kinds of information about individual claimants that may be present in the Garlock analytical database?

A. Yes. This is the list of all the information that might be present for a given claimant. Not every single claimant has all this information, because of the way that the data was received or collected in terms of -- there were some piece of discovery that was present for some claimants but not for others. Some claimants appeared in some publicly available sources and some did not, et cetera. But this is the basic information.

So we have very good information in terms of who were the claimants who filed the claim against Garlock, and what were the claim characteristics in terms of -- the claimant and claim characteristics in terms of their name, their social security number, important dates like birthdate -- birthdate, death date, diagnosis date. Whether they are -- well, if we have that date we can presume that they are deceased. We also have claim information in terms of where the claim was filed, the status, and the outcome of that resolution.

For exposure information we can see that we have all the categories that I have mentioned before, and it's basically information on the -- under a job and exposure histories by

years.

And finally in terms of other parties' information, is information about other defendants and trusts, trust claims filed and some additional -- well the ballots and the trust -- tort and trust recoveries.

Q. Are you aware of any database that contains as much information about asbestos litigation and asbestos claimants as the Garlock analytical database?

A. Well, I'm not. Since I've been working at Bates White and working with asbestos-related databases, this is the -- I would say that this is the database that has the most database About claimants that I have ever seen.

Q. Let's talk about where the new information in the Garlock analytical database came from. Did much of this information come from discovery granted in this case?

A. Yes. Most of it came from discovery.

Q. Did Bates White review or supervise the review of every piece of claimant-related discovery that the court ordered to be produced in this case?

A. Yes. We -- we considered all the discovery granted in this case, and we reviewed all the materials that were submitted.

Q. And much of that information is now loaded into the Garlock analytical database?

A. Yeah. The information that was most useful for the

estimation of Garlock's estimated liabilities has been added to the database.

Q. Now the court is very familiar with this, but just for the record, could you briefly describe the forms of discovery that Bates White received and used?

A. Yes. The first and probably the most important piece of discovery was the questionnaire. This was for -- this was a questionnaire sent to all open mesothelioma cases that appeared on the Garrison database at some point in time.

We also -- for a subset of those claimants, there was a supplemental exposure questionnaire that asked for additional exposure information. There was also a subset of claimants that received the supplemental payment questionnaire, which is the questionnaire that asked about tort and trust recoveries, and the number of parties that have paid -- that have made those payments.

We also have the discovery on the trust data from the Delaware Claims Processing Facility. And we also had the discovery on ballots cast from -- by claimants in 23 asbestos-related bankruptcies.

Q. Let's just briefly discuss what information was collected from each form of discovery.

What information did you get from what you've called the PIQ, and what I believe in the court's order is described as the mesothelioma claimant questionnaire?

A. Well, the main information that this questionnaire called for was information about the claimants. So information that identified them in terms of their names, their social security numbers, demographic information like birthdate, death date, diagnosis date, the fact that whether they were alive or deceased. Also detailed job and exposure information with respect to Garlock products. In terms of occupation, industries, locations. The way in which they were exposed to Garlock's products, in terms of whether they were handling the Garlock products directly, indirectly or they were next to someone who was handling those products and how they were handling them.

In terms of other asbestos products, also locations, occupations, industries like complete job and exposure histories.

With respect to the claims, it was basic claim characteristics such as where the claim was filed, when it was filed, what was the status -- what is the status of the claim, general status of the claim, other parties that were named on the complaint, and the status of the claim against those parties, whether there's been trust claims filed against the trusts, and what the status of those trust claims, et cetera.

Q. Through the questionnaire process, did Bates White learn that some of the mesothelioma claims that were listed as pending in the Garrison claims database, were not in fact

pending mesothelioma claims?
A. Yes. Through the process when claimants answer to the questionnaire in a large number of instances, the -- they would basically submitted a communication saying, my claim has been already dismissed against Garlock. Or I'm withdrawing my claim. Or the injured person or the mesothelioma person didn't have mesothelioma, and it was actually another disease.

So through that process, plus the updates that Garrison has made of the Garrison database, we were able to identify that about 2,000 records that initially appeared in the Garrison database as open mesothelioma cases, were in fact no longer open mesothelioma cases or never were.
Q. Can you briefly describe the different reasons why a claim might not be still an open mesothelioma claim?
A. Well, so they would say that their claim had been already dismissed, as I have on the bottom right box here, that the claim is already closed. In a few instances there were duplicates in the Garrison database. There were -- some claims were identified as inactive in the Garrison database -- in the most recent version of the Garrison database.

Or in some instances, the claimant will say that they never had Garlock exposure, and that they were withdrawing their claim. So in those cases we also considered that.

And in several cases they pointed out that they did not actually have mesothelioma, that they had another disease, and

that therefore they were not subject to the questionnaire.
Q. And the slide you are referring to is entitled "Pending Claims Classification After Data Collection"?
A. Correct.
Q. Approximately how many questionnaire submissions were there?
A. Well, submissions, there were about 4,200 claimants answering to the questionnaire. There were some additional submissions from the representative saying that that claim was no longer a mesothelioma open or pending claim.

These submissions also have attachments, and the number of documents that we ultimately received from this process were about 30,000 documents.
Q. So the questionnaire came in a variety of forms?
A. Yes. There were two main manners in which it came -- in which we received the questionnaire. About 1,000 claimants answered the questionnaire through the online portal Rust, which was the agent managing the data collection for the questionnaire that Rust had set up for them to submit their information.

The rest of the claimants actually filled -- filled in the fields in the paper versions of the questionnaire and submitted those questionnaires as paper documents by mail to Rust.
Q. Did Bates White review or supervise the review of every

piece of information that was submitted in response to the court's questionnaires order?

A. Yes. We went through all the documents looking for the information that will be responsive to the questionnaires, in the case that the information was not already available on the face of the questionnaire.

Q. How was information that was actually put on the face of the questionnaire, in other words, on the form itself, incorporated into the Garlock analytical database?

A. Well, the questionnaire order said that Garrison was to transcribe those -- that information from the face of the paper questionnaires to the -- into this electronic database that Rust was compiling. Now, that's what Garrison did.

After that, Bates White conducted a round of quality control on the transcriptions. We documented the error rates. And based on those error rates, we decided to ask another vendor, World Wide Digital, to go through the -- some of the questionnaires and confirm that the data had been collected correctly, and to supplement the data that might have been missed by Garrison in the first round.

After that, we also at Bates White conducted a round of quality control of that resulting data and we made sure that the error rates were what we -- what we found as acceptable.

Q. What kind of company is World Wide Digital?

A. It's a company whose business -- whose main business is

to transcribe data from paper documents into electronic form. They have personnel in India, I think, and they are able to transfer vast amounts of data from paper into electronic form for a very low fee per record.

Q. Now, that was information that was on the face of the questionnaire. Did Bates White also collect data from the attachments claimants sent in with their questionnaires?

A. Yes. We went through the questionnaires and collected the data that was not reported on the face of the questionnaire.

Q. Did Bates White follow a process for collecting information from attachments to ensure that that information was collected reliably and accurately?

A. Yes. We have a pretty strict protocol to collect the data. We followed several different steps. We have four review teams that participated in the data collection. And every time that -- we will basically train the individuals that were going to collect the data. We will do quality control rounds on the data collected concurrently as the data was being collected, to ensure that there was -- that all the data was collected in the same way, and there were no discrepancies in the data collection. After that we also performed several rounds of quality control, depending on what was the source of the data, and what was the nature of the data itself.

Q. What was the main purpose of having these review teams, instead of Bates White, for example, collecting all this data itself?

A. Well, the main purpose was cost. We -- the goal was to save as much money as possible to the estate. So one of the teams that we used for the data collection -- we have a data collection team at Bates White, but we also had Garrison staff help us with data collection, and that was at no additional cost, because they are already employed by Garlock, or they are part of the debtors.

We also had a team of contract attorneys that were hired by Robinson Bradshaw here in Charlotte that helped us to -- helped us collect data from PIQs and documents. And the reason for which it was run in Charlotte as opposed to DC, was because the Charlotte rates are lower than those in DC.

Now every time that there was any piece of information that was standard enough and that was very straightforward to collect, such as names on complaints that are just a list of names, just really in a very organized way, we asked this World Wide Digital Company to help us with the data collection.

Now after all the data was collected, every single time Bates White will go through and do a quality control round to make sure that the data was collected properly, and that the data was consistent, and that it was -- it met our reliability

rules that we have instituted.

Q. Did Bates White supervise all these review teams?

A. Yes. We had direct supervision of the review -- of the teams that were reviewing these cases.

We will have a person from Bates White, one of the -- of our most experienced claim file reviewers, because -- well, something that I must say is that Bates White has done these type of exercises several different times. This is not the first time that we went through a process of claim-file review. We've done these for multiple cases, not only asbestos-related. So we have very experienced people at Bates White who have gone through these processes in terms of hands-on data collection.

So we will have one of these people meet with a team, and basically stay with a team for long periods of time to ensure that all the data was collected correctly. And there was always an open communication between team leaders, or the team itself, and the Bates White quality control team to ensure that all the data was collected properly.

Q. What was the reviewer's goal as given to you by Bates White when they were reviewing documents and collecting information from you?

A. Well, the main goal was to collect all the data required by a template that we designed. And that that data was going to be collected exactly as it appeared in the documents. So

there was no -- there was -- there wasn't going to be any interpretation from the side of the reviewers. Every question that might come up will be addressed by the team leaders in discussions with myself and the other quality control reviewers at Bates White.

Q. Do you have an example for the court of how Bates White collected information from documents like those attached to the questionnaire?

A. Yes. We prepared some slides that describe the process of collecting the information for work histories.

So what is on the screen is the picture of the template that we constructed for facilitating the collection of the data. This template is just how it will look to the reviewers, although the data that was collected in this -- through this tool is the exact data that we have in the database and that we have in the raw sources of the database.

Now, but this template was designed to make it as easy as possible for the reviewers to actually fill in the -- just the fields that they were looking for from the data.

So now our reviewer will be assigned a case. And then he will go -- or he or she will go and highlight the case on the list. So as you can see there, claimant number seven is highlighted. So he or she will hit edit for the selected case. And then there will be other data.

Can we go back to the prior -- all the data at the bottom

will appear, which is all the characteristics for that claimant.

Now, for example, if we were to collect information in terms of work history, we will push the work history button which is at the bottom there, and then this window will appear.

Now in this window we will be able to collect what were the locations of this individual's job, what were the dates of their job, of their employment, or their exposure there, and some additional information.

Now if we wanted to collect the occupation that this person was performing in this job site, we will click the occupation button on the right. And then this new window will come up.

And on this window we will be able to specify the exact dates for that occupation within that site, that worksite, what were the -- what was the actual occupation and any other additional information that might be ready.

Now on this example we only have one record, but we will have had as many occupations within a worksite that's necessary. This was just an example.

Q. So using this tool, all the information that was provided about claimants' occupations, industries, and worksites where they were exposed to asbestos, were collected from the submitted questionnaires?

A. Yes. That was the -- this is a template that we use for all the data collection.
Q. Now I see the word "intermittently" entered in the occupation field. Is that an example of something that would have been entered verbatim from the documents that the reviewer was reviewing?
A. Yes. This will be an example. This is not a standardized form. So if they, for example, in the alternative, if the claimant had said on the deposition or interrogatory or even the questionnaire document, on and off as opposed to that, then on and off will have to be written in there.
Q. Just to be clear, you populated the template here with hypothetical data to avoid any confidential issue?
A. Yes. This data is not claims -- is for no claimant in particular.
Q. Now I see a button called "source document citation". Could you explain what the purpose of that was?
A. Well, this is a very important section in the template. Because to facilitate and actually to make possible the quality control of the data that we collected, we required the reviewers to specify the exact document and the page number in which they had found each piece of information from the -- when conducting the claim file review.
So in this case you can see that they will have -- click that button. This new window will come up. And they will

have been able to list all the documents and the page numbers and make a note if there was any detail that was necessary to give for the quality control person, or to whoever that wanted to review how the data had been collected.

Q. Now we talked about occupation, industry, and worksite. But did the template that the reviewers used have similar fields where they could enter the other information that might have been contained in the documents that they reviewed -- the questionnaire asked for?

A. Yes, it was. The template was basically designed after the PIQ. So it included all the information that had been asked for in the -- on the PIQ form.

Q. Is one purpose for requiring the reviewers to cite the source documents, so that Bates White can perform quality control on their work?

A. Yes. As I said, the main reason was to be able to review and to ensure that the data was properly collected and that the data was -- that all the data that was available had been collected, and that the data that had been collected was exactly what appeared on the documents.

Q. Could you explain for the court the quality control process that Bates White followed for ensuring that the information was collected reliably and accurately?

A. Yes. We have a slide on that.

So there are basically -- so the whole process starts on

the very left. We will assign a claim or a file to a reviewer of one of the teams. Then this reviewer will collect the data. And then there will be a quality control review of the data collected.

At that point there are two things that could happen. If the data needed required updates in terms of the reviewer having missed a piece of information, or not having sourced a piece of information, then the quality control reviewer will send the document back to the original reviewer and they will have a conversation about what was the -- what were the issues with that file to ensure that that issue did not appear -- did not happen again in the future cases.

Now, there were a couple of instances in which the data that had been collected and that had been flagged as having an issue, might have been flagged because of a misunderstanding on the reviewer's part. So if that was apparent, then the quality control review team will go back to other files from the same reviewer to ensure that this was an issue that only appeared on that specific claim, as opposed to all the claims that this reviewer had reviewed.

I must say that this happened probably in the whole process one or two times. It was very rare.

Now, if the quality control team did not find any issues with the data or the data was correct and complete, based on our review, then it will be added to the analytical database.

At that point there will be another review -- another review step which will be conducted by Dr. Bates or myself -- and myself, in which we will analyze the data and look for any patterns that -- or any points of data that seem to be outliers that could have been an error in terms of how data was collected.

If we identified any of those errors, then we will go back to the reviewer and ask the reviewer to confirm that that was exactly how the data appeared on the source documents. And if it was not, then to correct the error and then the whole document or just for that specific field will follow the whole process all over again.

Now, if the -- after the data review there were no identified issues, then it will just be part of the analytical database and we will do the data analysis and Dr. Bates will use it for his analysis.

Q. So the purpose of the data collection was to just capture in a useable form what the document said?

A. Yes. The main purpose of the database was to collect all the data that was relevant and to have it in a form that was standardized and clean so it could be analyzed altogether or in an aggregate way as necessary.

Q. And it would be accurate to say that there were multiple levels of quality control during the collection of this data?

A. Yes. There were multiple -- I mean, this process could

have been applied two or three times to a case, depending on the complexity of the case. There were also some specific fields that we were -- that we were -- for which we applied more rounds of quality control.

For example, we had this field that is the nature of exposure to Garlock gasket. So how people were -- how claimants were exposed to Garlock gaskets in terms of whether they were cutting or removing gaskets directly, or they were next to someone who was doing that, or they were at the same site -- et cetera. So all of those -- when we collected that information, all that information followed this process.

But then there were -- there was a number of claimants who had provided documents and they didn't have -- and we weren't able to find any nature of their contact with Garlock gaskets. For those claimants to make sure that we hadn't missed absolutely any information, we implemented yet another round of quality control to ensure that there were no additional -- there was absolutely no information that could give us a clue of how they were -- how they were in contact with Garlock gaskets.

Q. In your expert opinion, was the process that Bates White followed for collecting information from documents, submitted in response to the questionnaire, a reliable and accurate one?

A. I think it was. We -- given all the quality control processes that we implemented, I think that it -- the outcome

of the whole process was -- is very robust and I think is very reliable.

Q. Now, was it an expensive process to collect this information?

A. Yes. I think it was -- it was very expensive, yes.

Q. Did Bates White, nevertheless, where it was able to, seek to minimize the costs of collecting this information?

A. Yes. So every time that there was a way of saving on costs, we tried to implement something to that effect.

As I was saying, for example, we had the Garrison team here that -- sorry -- in Charlotte -- in Rochester, that were helping us with the review at no extra cost. We had the team of attorneys here that were helping us at lower rates. Then every time that there was a task that it was structured enough and easy to collect, we would give it to World Wide Digital which really charged us very, very, very small fees for per record.

Now, as in -- more generally, what we also did, is that we will collect only the data that was useful for the database that was to be used for estimation. So we didn't collect information that wasn't going to be used for the -- in the estimation.

So for example, there were a lot of -- there was a lot of information in terms of the addresses of the claimants, or the addresses of the plaintiff law firms. That information was

not sought and collected, for the most part, because it wasn't necessary.

There were a lot of medical documents that -- where the mesothelioma diagnosis was being discussed. We didn't collect any of that information, because we took all the mesothelioma claims as being mesotheliomas, regardless of what their medical documents said, and given that they also said that they were mesotheliomas.

Q. Now that -- if the claimant said they did not have mesothelioma, you took that into account though?

A. Of course. If they affirmatively said that they did not have mesothelioma, we would take that into account. But if they didn't say that they do not have mesothelioma, and then submitted a doctor's diagnosis document, we actually didn't try to collect any additional information from that, because we took it as a mesothelioma.

Q. Let's talk about the Supplemental Exposure Questionnaire. How did data collected through that discovery device enter into the Garlock analytical database?

A. Well, as part of the -- let me give a little background.

So in the first part of the questionnaire process, the original PIQ, there were several claimants who submitted -- instead of answering on the body of the questionnaire, submitted interrogatories or depositions.

Now, as response to the exposure questionnaire -- to

respond to the questionnaire, some claimants also submitted interrogatories or depositions. And so the -- so out of all claimants that had submitted through the PIQ, through the original questionnaire or through supplemental exposure questionnaire an interrogatory or deposition, we took a random sample to basically collect more data in terms of which other products they had been exposed to.

Q. So just to be clear, the original questionnaire didn't ask about other products, but some claimants submitted documents that described other products that they were exposed to?

A. That's correct.

Q. And the supplemental exposure questionnaire did ask about other products?

A. Yes. And we used the attachments to that questionnaire as -- to -- to design the -- to draw the sample that we reviewed to collect that information.

Q. You said that this information about other products that claimants identified was collected through a sample. Did you determine the representativeness of that sample?

A. Well, so that sample is representative of the individuals who submitted an interrogatory or a deposition within the PIQ, and that much I know.

Now whether that sample is representative of the whole Garlock claimant population, that's something that

Dr. Bates -- that's analysis that Dr. Bates performed. And I think that he was -- he was content with the representativeness.

Q. Was the information from this other product sample collected through a similar process to how you described the collection of the industry and occupation data?

A. Yes. We basically followed the same process, the same template process, and the same quality control process.

This is another -- well, we are now back to the beginning of the tool that I was showing you before. And you can see that at the bottom right there is a product exposure button. So our reviewer will have clicked on that button, and then this new screen will have come up.

On this screen they could have collected information about which products -- to which products the claimant was alleging to be exposed to; what was the manufacturer of these products; what was the -- any other characteristics about those products.

And as you can see on the right side, there were buttons that the reviewer will be able to show this is the source citation. They will be able to source all the information that was collected for that effect.

Q. What was the standard for recording of product exposure that reviewers were instructed to apply during this review?

A. Well, they were to collect every single product to which

a claimant alleged exposure. And if the manufacturer of that product was available, then they were going to collect the manufacturer.

Q. And was a similar quality control process applied to the collection of this information from documents?

A. Yes. We followed exactly the same process. It will be the same quality control process that we showed before on the slide.

Q. What information was gathered from the Supplemental Settlement Payment questionnaire?

A. Well, from -- this questionnaire was sent to 1,000 of the questionnaire claimants, and about 850 answered the questionnaire. And the question or the information sought in the questionnaire, was the total amount that claimants had received to that date by tort defendants, the total amount that they had received of trust -- from trusts, and trust payments, and then how many tort and how many trust parties had made those payments.

Q. Did you select a sample that the Supplemental Settlement Payment Questionnaire was sent to?

A. Yes, I did.

Q. How did you do that?

A. Well, it was just from the claimants that at the moment -- at the time of the questionnaire were still classified as pending mesothelioma claims. We just selected

1,000 of them with a straight random sampling technique.
Q. How was the data that was returned through the Supplemental Settlement Payment Questionnaire incorporated into the Garlock analytical database?
A. Well, it was returned on this format that is on the screen. Robinson, Bradshaw received these responses, and they had staff that could transcribe those responses into an Excel file. Then Bates White received both the Excel file and the original submissions, and we went through a quality control round to make sure that all the data that had been collected by Robinson, Bradshaw were correct and there was no data missed.
Q. What information was gathered from the data received from the Delaware Claims Processing Facility?
A. Well, this was data on -- Garlock requested data on about 11,000 settlements -- civil settlements from this facility. We received back more than 60,000, I believe, records, for about 9,600 claimants. The information was whether these claimants had filed trust claims against any of the 10 trusts that -- for which we received information. What -- when that claim was filed. What is the status -- or what was the status at the time of that claim against each one of those trusts; and if the claim had been approved for payment, what was the approval date; and if it had been paid, what was the payment date.
Q. Who were the 11,000 settled claimants that Garlock

requested data with respect to?
A. Well, there were all the settlements since 1999 through petition, I believe.
Q. Of mesothelioma?
A. Mesothelioma settlements, yes.
Q. And you said 9,600 out of the 11,000 settlements -- 9,600 of those claimants had filed at least one claim with one of those 10 trusts?
A. Correct.
Q. How is the data from the Delaware Claims Processing Facility production incorporated into the Garlock analytical database?
A. Well, we received the data through -- in a few different Excel spreadsheets. So we did not have to collect any data. We didn't have to transcribe any data. It was already in database form.

So what we did is we compiled the data together into just one file. And we reviewed the data to understand how the data had been constructed. We found that there were a few duplicates in the data, because in some instances it appeared that a claimant had filed a claim that had been withdrawn, but then the claimant had refiled the claim.

And in some of these instances, those will be two different records on the table that we received from DCPF. So in that case we will just duplicate that to count as one trust

submission.

And well, we basically went through the same process of finding who were the claimants in the Garlock analytical database that had provided that information, and we just merged the information from the fact that they had filed one of these claims, the dates, et cetera, to the main part of the database.

Q. What information was gathered from the ballots that had been subpoenaed by Garlock in the case?

A. Well, the information was -- the main information was whether a claimant had submitted a ballot, or had submitted a vote to one of these bankruptcies, and to which bankruptcy they had submitted the vote.

To be able to identify claimants in the Garlock database, what we did is collect the name of the claimants, the social security number or the portion of the social security number that appeared on the ballot, to be able to match it back to the Garlock database, and also the plaintiff law firm who had submitted the ballot. Because that was also useful for identification of the claimant. And we also collected -- or collected data on the date in which the ballot was due.

Q. Does this slide entitled, "Asbestos Bankruptcy Ballots" available in this case, summarize the cases where you received ballots?

A. Yes. It has the names of 23 bankruptcy cases for which

we received ballots.

Q. How was the information gathered from ballots?

A. Well, we received -- in some instances we received Excel files, in some other instances -- or most of the time we actually received documents, electronic documents as the one that we have in the previous slide where the data needed -- wasn't -- we needed to collect the data off of those documents.

For this task we asked World Wide Digital to do data collection. Because it was very easy to just collect the names of the claimants, and the couple of additional fields that were basically attached to lists -- attached as lists to these ballots.

So that was -- World Wide Digital entered all the data from documents into Excel form that was then received by Bates White, and we did reviews of the data collected by World Wide Digital to make sure that the data was correct.

Then using the fields that I mentioned before, then we will go on and try to identify the claimants in the Garlock analytical database.

Q. In addition to discovery we talked about, did Bates White also undertake a data collection effort to obtain more information about resolved Garlock claims?

A. Yes. So to supplement information that had been collected by the PIQ -- so the PIQ was -- provided information

for pending cases. So now to be able to make comparisons and to have a complete picture of Garlock's history, what we did is to select a group of resolved cases, historically, to try to collect the same type of information. And for that we drew a random sample of those historical cases.

Q. Did you design that sample of resolved cases to collect information from?

A. Well, I implemented the sampling, although the main design in terms of what were the subgroups that needed to be covered by the sample, was an instruction given by Dr. Bates.

But his instruction was basically, I need a representative sample of all historically resolved cases, and we need to make sure that we have verdicts -- in this sample we include all verdicts, we have settled cases, and we also have dismissed cases. And we also needed to ensure that we have coverage of all of Garlock's history in terms of timing. So that's why we divided the claiming -- the resolution -- the resolved cases historically into these three time periods to ensure that there were -- in the final sample there were claims from every single period.

Q. Does the table at the top of the slide entitled "Historical Garlock Claim File Review", summarize the sampling strategy for the resolved claim file review?

A. This shows what was the outcome of the sample selection. So at the time we sampled 1,156 cases. We included all the

verdicts in which case you might say that it was a census of the verdicts rather than a random sample. We also sampled settled cases and dismissed cases, and then we sampled for these three different time periods.

Q. After you had designed the sampling strategy, what did you do?

A. Well, we basically asked for the documents from Garlock, and they were able to produce about 785 cases. We reviewed these cases, and then with the data collected, we went back to the population and made sure that the groups that we had targeted in the beginning, which is the first table on the slide, were actually covered by the information we had received. And the bottom table is what shows the coverage of the resulting sample. The one that we actually reviewed.

Q. So you determined that the files that were actually obtainable were sufficiently representative for Dr. Bates' work?

A. We -- we verified that this was a representative sample of the resolved population -- of the population of resolved cases.

Q. Did you supplement the random sample that you described with other historical claim files?

A. Yes, there were additional cases available. Because in the files collection exercise that Garlock went through, they were able to collect information or files on additional cases,

these were mostly resolved cases. And because these cases were -- had significant amount of information available, and they were already available for review, we reviewed a number of them.

Q. Now, when we say claim files, what sorts of documents does that entail?

A. Well, it will be -- usually will be the actual complaint. In many instances we will have the interrogatories, possibly multiple of them, many of them, several of them. Then we will have depositions, in some cases multiple depositions. We will have exhibits that were attached to the depositions or interrogatories and those sorts of documents.

Q. What information was collected from the files that you received?

A. Well, it was for the most part the exposure -- the job and exposure history information.

Now the -- there was a lot of information that we have collected for the PIQ claimants that was not available for the resolved cases, because that information was just not available to Garlock in the tort system.

So, for example, we were not able to collect information about trust filings for these cases. And we were not -- well, we don't have information about the status of the claims from these claimants with respect to other defendants. We don't have information about recoveries, tort and trust recoveries

as I was explaining before.

So it was -- the goal was to collect as much of the information that we had collected for the PIQ from these cases with the limitation of what information was available.

Q. Did you use the same data collection tool and quality control process that you used when collecting information from the questionnaires?

A. Yes, we used the same -- basically the same template, the same process, the same quality control processes. And for the most part, the same teams that collected information from the PIQ.

Q. Now, we talked about the ballots before. Did some of the ballots relate to claimants who had resolved mesothelioma claims with Garlock?

A. Yes, the ballots -- the ballots were not restricted to open or pending or to resolved cases. It was for -- we had ballots for all the claimants who had voted in those bankruptcies, as far as we know. Some of them -- some of the ballots that we received clearly were not complete, because there were documents filed in those bankruptcies counting the number of ballots. And when we collected the data, we would have fewer ballots than what those documents will say. But we had -- we basically collected all the information that was available that we received.

Q. Is there any other data that we haven't talked about yet

that went into creating the Garlock analytical database?
A. Well, I mentioned before the copies of the Manville and CCR databases that we have at Bates White. From those databases -- we used those databases to supplement the Garlock analytical database in the sense that there might have been some cases for which we didn't have a claim file review, and were not pending mesothelioma claims, part of the PIQ, but were found in these databases and they had some information in terms of occupations, industries, some exposure history. So we used that information to supplement the database when no other source of information was available.
Q. Dr. Gallardo-Garcia, does your expert report contain more detail on all the topics we discussed today?
A. Yes. On my first report we have the -- I explained all the steps that we followed -- the -- each one of the data sources that we used. And on the production materials that we submitted after sending the -- submitting the report itself, you can find all the scripts and data sources and all the information that went into creating the Garlock analytical database.
MR. WORF: Your Honor, I have a few exhibits, may I approach the witness?
THE COURT: Yes.
BY MR. WORF:
Q. Dr. Gallardo-Garcia, could you look at the object that

I've marked as GST-8002.
A. Yes.
Q. Do you know what that is?
A. Yes, it's a drive that -- where the data submitted to the PIQ -- basically all the data submitted in discovery was copied into and also a copy of the Garlock analytical database.
Q. So it contains copies of the PIQs that were submitted, the supplemental questionnaires, the Delaware claims data, and the ballots, as well as the Garlock analytical database?
A. Correct.
MR. WORF: Your Honor, we would move to admit the hard drive that I've marked as GST-8002, under seal, due to the protective orders that the court has entered in this case.
MR. GUY: Your Honor, we have no objection. So long as we have copies our expert can review them.
THE COURT: Okay. All right.
MR. WEHNER: Your Honor, we can't see inside this right now, and so we'll reserve our objection until we can take a look at it, but if it's as he described, we're all right.
THE COURT: All right. We'll admit that subject to the comments later.
(Debtors' Exhibit No. 8002 was received into evidence.)

BY MR. WORF:
Q. Dr. Gallardo-Garcia, I'm going to mark as GST-8003, a copy of your slides that have been on the screen today. Is the copy that I handed you a copy of your demonstrative slides?
A. Yes, it is. I think. Yes, it is.
MR. WORF: Your Honor, we move to admit that as a demonstrative exhibit.
THE COURT: We'll admit that.
(Debtors' Exhibit No. 8003 was received into evidence.)
BY MR. WORF:
Q. And then finally I believe I've marked as GST-8004, a copy of your expert report. Is that in fact a copy of your expert report?
A. Yes, it is.
MR. WORF: Your Honor, we move to admit GST-8004 on the same basis that other expert reports have been admitted in this case.
MR. GUY: Your Honor, no objection. I do believe that by the end of the case if I say it enough times, debtor counsel will need to give us copies. That's all we need.
MR. WORF: I'm sorry. We have them here.
MR. GUY: Maybe this is the time.
MR. WORF: (Handing paper writing).

MR. GUY: Do you have the demonstrative?
MR. WORF: Yes. (Handing paper writing.)
MR. WEHNER: No objection.
(Debtors' Exhibit No. 8004 was received into evidence.)
MR. WORF: Thank you, Dr. Gallardo-Garcia.
THE COURT: Okay. Who wants to go first?
MR. GUY: Would we like to take a break?
THE COURT: I would like to go for a little while first.
MR. GUY: Do you mind if I do the cross-examination from here?
THE COURT: No, that's fine.
MR. GUY: But I do have a very sophisticated, and in honor of Mr. Magee, a cheap exhibit.

CROSS-EXAMINATION

BY MR. GUY:

Q. We're not going to ask any lawyer to count those.

Now Dr. Garcia, you remember I deposed you, I think it would be most expeditious if we put up Dr. Gallardo-Garcia's deposition transcript, starting at page 207.

I deposed you and you said that you consider yourself to be an expert in financial reporting?

A. Yes. I've been working with financial reporting issues -- financial reporting cases since about 2007. And I

think that I have experience in that, yes.
Q. And Mr. Worf showed you a slide, and there's a lot of companies that you've done that work for, correct?
A. Yes, there's a few, yes.
Q. And when I say, "done that work", I mean in the context of financial reporting concerning asbestos liabilities.
A. Yeah, well, it's asbestos-expected losses, yes.
Q. Are you familiar as an expert in financial reporting, with the Financial Accounting Standards No. 5?
A. I've read them a couple of times, a long time ago.
Q. I'll put it on the ELMO. You're familiar with that, correct?
A. Yes, yeah.
Q. You've read it before, right?
A. Yeah.
Q. Now, I know you're not an accountant, sir, but I know that you're an expert in financial reporting so I have one just quick question on this.
Can you read that, sir, at the bottom, "accrual of loss contingencies". Is that what you're doing in helping these companies prepare estimates as to their asbestos-related liabilities?
A. Yes.
Q. Can you see at the top there it talks about the appropriate standards. You see it says, right here:

"Information available prior to issuance of the financial statements indicates that it is probable that an asset has been impaired, or a liability had been incurred at the date of financial statements. It is implicit in this condition that it must be probable that one or more future events will occur in confirming the fact of the loss." Do you see that, sir?
A. Yes.
Q. And that's what you're doing for these companies, right?
A. Yes.
Q. And then it says, "the amount of loss can be reasonably estimated." Do you see that?
A. Yes.
Q. So when companies engage you, they're asking you to give them estimates consistent with that standard, correct?
A. Correct.
Q. You've done that for literally -- well, at least 20 companies?
A. No, well, I showed I think five in the exhibit.
Q. All type -- a lot?
A. Well, five -- between five and 10, yes.
Q. Well, we have it on the demonstrative, sir.
A. Although, not all of them were financial reporting. So some of them were bankruptcies. It's just -- was a list of names of companies that I've worked data -- that I've had experience working with their data.

Q. Now, you did that for EnPro, didn't you?
A. Yes.
Q. And when you prepared the estimates, whether it be for EnPro or anybody else, you're trying to figure out the amount of money that a company will need to pay current and future asbestos claimants, right?
A. Yes, in the tort system.
Q. Right. Are you familiar with what Judge said in his order in April 2012 about what we're trying to do here today?
A. No, I'm not.
Q. All right.

MR. WORF: Your Honor, the debtors have filed a motion seeking to exclude evidence of the financial reporting, and the estimates that Bates White did before the petition, to the extent they're being used to show Garlock's liability. We understand the court is probably going to hear the testimony, but we would like to have a continuing objection --

THE COURT: All right.

MR. WORF: -- on the basis of that.

THE COURT: I'll allow your objection, but I'll allow him to examine, allow his testimony.

MR. NEBRIG: Your Honor, just for the record, Coltec would like to preserve that objection as well.

THE COURT: All right.

MR. GUY: Your Honor, I would hope you would rule on

it because I have a great argument, but we'll move forward.
BY MR. GUY:
Q. Now I've been carrying this around with me for over a year. I'm hoping that someone will actually focus on what I think is the key language. I tried it out in all depositions and I get lots of objections, but I want us to focus on paragraph 10.

"The Court anticipates hearing appropriate evidence for the purpose of making a reliable and reasonable estimate of the aggregate amount of money that Garlock will require to satisfy present and future mesothelioma claims."

Do you see that, sir?
A. Yes.
Q. And I know that there's different theories, but that's what we're trying to do, correct?
A. Yeah, that's correct.
Q. And that's what you did pre-petition, isn't it, sir?
A. Well, it was -- it was -- in terms of reliable estimate, yes, it was just in two different contexts.

But just to be clear on something, it is not I who is trying to present an estimate of Garlock's asbestos liabilities to this court, it's Dr. Bates and he's going to talk about that --
Q. I understand.
A. -- when it's his turn.

Q. But the debtors have put you up as an expert. We know you're an expert on these issues. I don't want to spend long on it, I want to test what the debtors did pre-petition -- what other companies did pre-petition to answer the question the judge has posed.

MR. NEBRIG: Your Honor, just briefly, Dr. Gallardo-Garcia was not tendered as an expert in financial reporting for the purposes of direct examination. So I think going into that at this point is outside the scope.

MR. GUY: Your Honor --

THE COURT: Go ahead. Finish.

MR. GUY: Thank you, Your Honor.

Q. Now, can you tell me why it's appropriate -- well, let me step back.

When you did these estimates for EnPro and other companies as to the amounts that would be required to resolve the present and future mesothelioma claims, what did you look at? Did you look at the prior claims history?

A. Yes.

Q. You looked at what the company paid in the real world to resolve those claims, right?

A. What the companies paid in the tort system, given the conditions that they face in the tort system, and the -- the costs that they face in that situation.

Q. And you looked at the historical data that was available

to you for each of those companies, right?
A. Yes. In those cases, first of all that's usually the data that is available. And the -- second of all, provided that they remain in the tort system and they faced similar conditions, that's the data that we use.
Q. And Dr. Garcia, in the context of this case, the equivalent database, what you looked at for all these companies including EnPro, we know for this case is the May 2011 database, correct, the Garrison database?
A. Well, it's -- it's that database, but we know significantly more about the case -- the claims in that database --
Q. I understand. But I'm just trying to lay the foundation for what it is that you looked at.
Now you -- pre-petition you looked at that database, right?
A. Well, we looked at the most up-to-date version of the Garrison database -- or the Garlock database that existed.
Q. And putting aside your analytical database, I know you said all the good things you did to prepare that database and all the work that was done, all the quality controls. I'm just focusing on the May 2011 Garrison database. That's what Dr. Rabinovitz used to prepare her report; isn't it?
A. For the most part, I think that she used a couple additional sources of information, but it was mainly that

database.
Q. For the purposes of answering my question, I want you to imagine the cups there on my right is the Garrison database, May 2011 database. And I want you to imagine the cups on the left is the Bates White's analytical database; does that work?
A. Yeah, that's fine.
MR. CASSADA: Did you bring copies for us?
MR. GUY: They're on your table.
Q. Now, why is it appropriate when you're doing estimates for EnPro and other companies that are going to be relied upon in the marketplace and satisfy securities laws, that you extrapolate in the future from the history of claims? Why is that appropriate?
A. Well, it's appropriate because that's the information that's available in the -- in those specific instances. Now the -- that's -- that also assumes that the company's going to be facing the same claim resolution dynamics that they faced historically.
Q. In fact, in your deposition, if we can turn to page 210, 211, at the bottom, line 22. Line 22 through -- you said "Well, first of all, because that data was available," as you just said. "And second of all, because we are forecasting what will be the expenditures in the tort system for those defendants. So that was the data we used," right?
A. Yeah.

Q. I want to focus on EnPro. You did this, what, starting in 2009?
A. Well, I started working on the -- with helping Dr. Bates with financial reporting -- with EnPro's financial reporting estimates probably 2007, sometime 2007.
Q. So you prepared those reports on an annual basis for EnPro, and they were used in the securities filings up to the bankruptcy filing, right?
A. Yes. They were not on an annual basis. If I remember correctly, they were done every quarter first, and then I think -- then we went into annual use.
Q. Now you provided ranges, right?
A. Dr. Bates did, yes.
Q. And those ranges changed each year, didn't they, a little bit?
A. Yeah, there were some changes in the ranges.
Q. Okay. Now, we could turn to page 212 of your deposition, line 9 through 21.

MR. WORF: Your Honor, I don't know if this is proper use of deposition. He's on the stand. He can be asked the question.

MR. GUY: Your Honor, I'm just trying to expedite.

THE COURT: Go ahead.

BY MR. GUY:
Q. I'm really -- so you said there, as to why they changed,

"depends on the estimates. We had several statistics that we used in putting those forecasts together".

Do you see that?

A. Yeah.

Q. You said, "for example, in the analysis that we performed, the financial reporting for using Garlock's history, your basic estimate, for example, the propensity to sue, in a detailed way by law firms or by jurisdiction, and we use different periods, and the forecasts varied at the time," correct?

A. Correct.

Q. So this was a fairly detailed endeavor, wasn't it? It wasn't something that you just sort of sat down at a bar and put on the back of a napkin?

A. Well, no, we were -- we used all the data that was available to us. And as I was saying before, we tried to use it in -- as economists usually do, which is to disaggregate the data as much as possible to be able to capture the nuances of the data.

Q. In doing that you used the Garrison database that Dr. Rabinovitz used, didn't you, as updated at the time of the bankruptcy?

A. Yes, the Garrison database. But we were also -- I mean, yes, for the most part. There will be additional information that will be provided by Garrison, for example, when the

Garrison database that we were using was not entirely up to date, they will provide additional information and then we will take it into account.

For example, to give an example that is parallel to what we saw in this case, there were a couple of instances where we will have the version of that Garrison database in a given date. Then there will be -- sometime we'll go on, say three weeks or so, and Garrison will let us know that there had been additional settlements or additional dismissals of the report since the version of the data -- since they gave us the version of the database that we were using for analysis.

In that case they will give us that additional information, and then we will add it to the Garrison database to make sure that we were using the most up-to-date data. The comparative to this case -- just give me a second -- comparative to this case will be, for example, the PIQ responses about whether claimants don't have a pending mesothelioma claim or not --

Q. I don't want to cut you off, but I'm really focusing on the pre-petition database right now.

A. Yeah, but what I'm saying is, that's the type of data that we will have used. If that data had been available, we would have used it.

Q. Okay. So if you got new information, you properly updated your database so that your forecasts would be

accurate, right?
A. That would be -- yeah, we would be using the best data available --
Q. And in fact --
A. -- to us.
Q. -- when you were asked about the Garrison database, which is the database that Dr. Peterson and Dr. Rabinovitz relied upon, which was provided to them by the debtors, you said it's a very robust and reliable database, that in my opinion exceeds what the quality of database that we would use for economic research in some other states. You said that, right?
MR. WORF: Jonathan, I think you're misquoting the deposition. I think he was talking about the Garlock analytical database.
THE WITNESS: I was talking about the Garlock database. I wasn't talking about the Garrison --
BY MR. GUY:
Q. So you don't think the Garrison database was robust and reliable?
A. I think it's a good database. For the information it contains, I think it is robust. Now it doesn't have all the information that we used for estimation. And also we know through the responses to the PIQs and the information we received in this case, we know that the May 18th, 2011 version is not entirely up to date.

Q. Okay. Now you would agree with me, sir, that if you've got a group of experts on different sides of the aisle trying to answer the same question posed by Judge Hodges, they should be looking at the same database, shouldn't they?
A. I agree they should have access to all the same data. I agree with that.
Q. You agree they should be looking at the same database, don't you, sir?
A. That would be if they were -- if they could agree on the database, I think that would be a good thing. Now the databases they should be looking at is better data, not incomplete or outdated data.
Q. Now, in this case we ended up with, it turned out, two databases, didn't we? We have the May 2011 database that the debtors gave to Dr. Rabinovitz and Dr. Peterson, right? And then we have this database that in the background Bates White is preparing, right? The analytical database?
A. The Garlock analytical database.
Q. Yeah. Two databases?
A. That's Bates White's database based on the Garrison database.
Q. But they're different, aren't they? They're not the same. You've got one on the left, one on the right. They're not the same?
A. We've supplemented the Garrison database with the better

information that we received through the process, yes.
Q. Okay. Now, are the computer models that Bates White uses, proprietary in any way?
A. Can you repeat that question, please?
Q. Are the computer models that Bates White uses, proprietary in any way?
THE COURT: Why don't we take a break and get that question when we come back. Let's just come back at 25 till.
(A brief recess was taken in the proceedings at 11:25; court resumed at 11:34.)
THE COURT: All right. Mr. Guy.
BY MR. GUY:
Q. Dr. Garcia, before we broke I was asking you about the analytical database that Garlock prepared. And my question was whether that was a proprietary database or not?
A. Well, no, it's not. I mean, it's basically the database that we put together for the case. It's not Bates White's, it's Garlock's.
Q. Now, at any point in the case, did Dr. Rabinovitz have free access to that analytical database?
A. No, I don't think we were ever asked to give her access and she didn't seek access either.
Q. Actually we didn't find out about that database until the expert reports were filed, right?
A. Well, I don't know what you mean about "find out about

that database". So in all the cases that I've participated, there is -- there is a debtors' database or an asbestos defendant database. And additional information is provided in the course of the case, usually for all the time, at least in my experience, that information is used to supplement or update the defendant's database or asbestos defendants' database, and that is what is used for analysis. So, I mean, that's the normal process that we follow in every case that I've participated.

Q. Now, how many cases have you participated in, in the bankruptcy arena, where you had experts representing different parties looking at a database to derive estimates to provide to the court?

A. Looking at a given database -- well, the ones that I mentioned, the Plant Insulation, NARCO and ASARCO, those three cases, my understanding is that all the parties, just as in this case, received claims data. They also received additional information that was obtained through discovery or through some business record from the debtor. And we at Bates White supplemented that claims data with information that we collected from the available sources, and we used the resulting database to do our analysis, just like we do here.

Q. So, for example, taking ASARCO, in that case, each expert was at least using the same original data, right?

A. The same claims -- claims data.

Q. Right. Now in this case we've got two databases, one on the left and one on the right. They're not the same, do you agree with me, sir?
A. Well, no, those cups that you have there, you are saying that one is the Garrison databasebase the other is the Garlock databasebase. The Garlock database, is what Bates White put together, based on the Garrison database.
So if you want to use your cups then, you could say that all the cups on your right, are included in the five cups on your left, plus more information because we got more information in the case based on discovery.
Q. I agree with you 100 percent. But they're different?
A. Yeah. The one -- the one on the left has more information that was provided in discovery, that's true.
Q. Now the one on the right, there was a question I asked you whether it was robust and reliable. And the issue is whether you were referring when you said that to the analytical database, which Bates White had which no one else had, or the Garrison database that everyone had.
And I think you said in your deposition, we turn to page 217, starting at line 18:
"I want to be clear about what we're talking about. When you got the May 18, 2011 database, which had changes in it from the earlier databases, correct?
"Correct.

"It had various adjustments and changes made to it, correct?

"Correct."

Next page.

"And compared to the other databases that you used for other forecasts for other companies, you would say that the Garrison database" -- I'm sorry. Read at the top.

"You looked at that database before you did anything else to it. Did you consider it to be a reliable and robust database?"

Your answer was?

A. "Yes, I think that for the most part as compared to the other databases that we had received in this case from Garrison, it was the best record."

That was exactly what I meant. So compared in this case, the May 18th version of the Garrison database is the best version, that's true. That is, I think, a good record of Garlock's claims, that claims that have been filed against Garlock, that's also true. Now that it's lacking important data that we now got through discovery, that is also true, and that's why we used the data we got through discovery, to supplement the Garrison database to get to use the best data that we could get in this case.

Q. We're going to get to that in a minute. I just want to focus on what the creditor experts has.

Go down to the next -- go down to the next page, line 21:

"Compared to the database that you used for other forecasts for other companies, would you say that the Garrison database is a well developed and fairly extensive database."

By that I mean, it's got a lot of information in it.

And your answer was:

"I think the database, the Garrison database has a significant amount of information. Sometimes information that is not typically collected in other asbestos-related database. Through the years by doing the work for financial reporting, through the comparisons that we made across the data sources, we were able to determine that the information that is contained in the Garrison database is substantially accurate."

Do you agree with that?

A. Absolutely.

Q. Now going back to the financial reporting, those estimates go out what, 10 years?

A. Yes.

Q. And that's just something that's set by the accounting standards?

A. No, I don't think that there are any standards on the length of the --

Q. But for all the estimates you've done for all the companies that you've worked for, they've already gone out 10 years?

A. Usually they go out 10 years.
Q. And in forecasting for the next 10 years, you look at prior claims information, correct, and verdict information?
A. Yes.
Q. And you use recent claims information, don't you?
A. Well, we use the full history, not recent claims information, the full history. And we tried to understand what are the -- what's -- what it is that -- what's the defendant's situation in the tort system, and how the defendant came to experience the litigation that we observe in the data.
Q. And who makes the decision how far back you go?
A. Well, that's based on the data analysis. If you're asking specifically about the work that we did for Garlock, that would have been Dr. Bates.
Q. So he makes the decision as to the cutoff point, as to whether you go back to 2005, 2000, or 1990 or 1995, correct?
A. Well, it's more involved than making a decision of a cutoff point. The full analysis of what are the different scenarios that you can generate based on different pieces of information, and that's actually one of the sources for the range that you were mentioning before.
Q. One of the big issues in this case is, you're trying to forecast in the future, so we know we looked into the past, correct?

A. Correct.
Q. The question is how far in the past do you go back, what is the appropriate -- I think the technical term is "calibration period". Do you understand what I mean by that?
A. Yes, I understand.
Q. So, for example, do you use 2005 to 2010, or do you use, 2000 to 2010, right? That's a calibration period?
A. Yeah, those would be examples of what sometimes is called "calibration period", yes.
Q. It's a temporal component?
A. Yeah.
Q. Okay. Now, when you did the forecast for EnPro, what calibration period did you use?
A. I don't recall.
Q. You don't remember?
A. No. But there were different -- that's exactly what I was trying to explain before. So there were multiple calibration periods, because when we were generating different scenarios, depending on what was the calibration period, will be the estimate that we will -- that we will get. And there was no single calibration period, if that's what you're asking. And I don't remember what were the multiple calibration periods that we might have used back in the day.
Q. For the 2010 securities filings that we've made, did you use the period prior to 2010?

A. Yeah. We used the history, yeah.
Q. Did you exclude the history from 2005 to 2010?
A. Likely it was included, but I wouldn't be able to tell you whether it was -- we used the calibration period that went back to 2003 or only to 2008. That I don't remember.
Q. Now, would you agree with me, sir, that if we're going to give the court true apples-to-apples comparison, that all the experts need to be using the same database?
A. At least they should be using the same information. It's clear based on my review of the data, the analytical data, that Dr. Rabinovitz and Dr. Peterson provided as backup, the materials to their analysis, that they did not use all the information available in this case.
Q. Now, the additional information that was available in this case that you used to supplement your Garrison database, when did you get that?
A. Throughout the whole -- the whole case. You know, when the PIQ first started, it was probably sometime in 2011 that questionnaires started coming in. You know, that the data is -- the last version of the data, Garrison database is from May, 2011. I mean, we got several different pieces of information that we received at different times.
Q. So, at any point in time did you say to Dr. Rabinovitz or any of her colleagues, we got this new data coming in. We actually think it's very reliable, we've given you a corrected

database that you're relying on. Now we want to make some further changes, here it is, this is what we've got. This is why we think it's reliable. We'd like to sit down with Dr. Rabinovitz and Dr. Peterson and Dr. Bates, and all agree that that information should now be included. Because everybody agreed to use the May 2011 database. Did you ever have that conversation with Dr. Rabinovitz?

A. Well, so first of all, the -- they received -- all the parties, as long as I know -- as far as I know, all parties received the -- exact same information. I know that the Rust, talking about PIQs, had a portal where every party could just log in and download the information. That was available to everyone.

So when you say that we could have let Dr. Rabinovitz know that more information was coming in and it was reliable, that was information that she already knew that was coming in because she received it at the same time as we did.

Now in terms of whether we got together and tried to agree on a database, we -- we were never asked to reach out to Dr. Rabinovitz, and Dr. Rabinovitz didn't reach out to us to see if we were collecting the information, and that we were standardizing the information that everyone had received.

Now there were a couple of -- there was at least one instance in which there was an exchange of information between the experts, and that was when -- that was probably in

February 2012 when the debtors were going to file a motion to compel the questionnaire claimants that had substantially responded to the questionnaire, to submit more information.

At that time, Your Honor had ordered the parties to get together and to try to agree on which individuals should not be included in that motion to compel.

And at that time we had communications with -- at least I know that we have communications with people from Dr. Peterson's outfit, and that there were more people on the phone. I wouldn't know, I wouldn't be able to say who else was there.

But I know that we discussed the information that we had collected from the -- at a time, from the PIQ submissions, and we offered -- we, as in Bates White, offered to give, provide lists of all the claims that we had classified as no longer being (indiscernible) claims. We provided lists through Robinson, Bradshaw, we provided lists, listing all those individuals, identifying in which documents we had found the information that led us to believe that these were not open mesothelioma claims.

And there were a couple of exchanges of information after that with specifically Mr. Relles who works with Dr. Peterson. And well, after that, we were open to any questions if there were anything that we could basically review with them, and we never heard back. So we just assumed that that was the end of it.

Q. The parties didn't reach agreement to update the database as to that issue, correct?
A. Well, we were open for discussion, and they never reached back, so we assumed that they agreed.
Q. Dr. Gallardo-Garcia -- sorry. I want to expedite this. So we have a clean record, the parties didn't reach agreement, at least Bates White and Dr. Peterson's shop, didn't reach agreement to update the May 2011 database, did they?
A. We were not going to update the May 2011 database that's -- whatever -- we were talking about the classification of the claims.

Now, I mean, to update the May 2011 database, that was a different process, because Bates White is not the administrator of the database. We just received that database from Garrison.

Q. In the beginning of the case, the debtors had a database, didn't they, the database that you relied on to do the financial reporting, 2010, right?
A. Yes.
Q. Garrison database. And it shows verdicts, settlements, doesn't show verdict?
A. Doesn't show verdicts.
Q. Shows settlement amounts, right?
A. Yes.
Q. Shows claims, right?

A. Yes.
Q. Names, that sort of standard information?
A. Yes.
Q. You had that database, right? Correct?
A. Yes.
Q. And then the following year, because of things that were taking place in the case, information that you had, you updated that database, didn't you, or Garrison updated it in May 2011?
A. Yeah, Garrison.
Q. Yeah. So they updated that database, didn't they, sir?
A. It was updated by Garrison, yes.
Q. Then they provided that updated database saying, this is the database. You should rely on this database. It's accurate, you said it in your deposition, most accurate you've seen, and that was provided to the experts, wasn't it?
A. That was my understanding, yes.
Q. Now, one of the things that you take the FCR's expert to task for, concerns settled claims in your rebuttal report, do you remember that?
A. Yes, I do.
Q. I just want to focus on the one. We've got lots, Your Honor, but we got to get through this case quickly.
MR. WORF: Your Honor, one objection. We're going to bring Dr. Gallardo-Garcia back to address his rebuttal

report after Dr. Peterson and Dr. Rabinovitz have testified. It may be more judicially economic for Mr. Guy to talk about his criticisms after he has had a chance to actually present them.

THE COURT: All right. We'll let him decide what he wants to do.

MR. GUY: We can do it later, Your Honor.

THE COURT: Okay.

MR. GUY: I don't know whether we'll have time. We can do it later.

THE COURT: Whatever.

MR. GUY: Let's just get it out now so we have it on the record, and I'm just going to focus on the one issue because we only have limited time.

Q. Now, in your rebuttal report which I hope you have there --

A. No, I don't.

Q. Why don't we just pull it up on the screen. Go to page eight, paragraph eight.

Now I understand that the debtors are going to go through this later, but you criticize Dr. Rabinovitz and Peterson because of the databases they had, right?

A. Yes. Databases they constructed for their analysis, yes.

Q. Well, the May 2011 Garrison database, right?

A. Not quite. Because they took that database and they made

modifications to that database to construct their own analytical databases.

Q. Now, I want to focus on No. 2, "HRA", that's Dr. Rabinovitz, "incorporated relevant information that was provided by the debtors to supplement the Garrison database when necessary." Do you see that?

A. Yes.

Q. So we're talking about supplementing the Garrison database. We're not talking about the PIQs and the ballots and all of that. Because there's a lot of debate between the parties as to what the PIQs mean; and whether there's agreement; and how they should be interpreted; and what does a ballot mean? Is a ballot really a claim or isn't it a claim? We're talking here about supplementing the Garrison database when necessary, okay? And you're criticizing Dr. Rabinovitz because she didn't include it, correct?

A. Yes.

Q. This is your rebuttal report?

A. Yes.

Q. And your rebuttal report is dated --

A. April 23rd.

Q. Right. Your original report was February 15th, right?

A. Correct.

Q. That was when all the reports were filed, February 15th?

A. Correct.

Q. Now, one of the things that you complain about in paragraph 12, "Reported 427 liquidated and disputed claims", see that?
A. Yes.
Q. Both of these numbers are incorrect?
A. Yes, they are.
Q. Now, what did Dr. Rabinovitz rely upon in her report? She relied upon the Debtors' response to interrogatories, if you go to the next line. Do you see that?
A. Yeah, I see that.
Q. And you know that because we went over that in your deposition?
A. Yes.
Q. Was she wrong to rely upon interrogatories provided to her by the debtors?
A. No. Absolutely not.
Q. No, she wasn't, was she?
A. Absolutely not. But let me explain that paragraph.
The --
Q. You'll be able to do that.
A. Give me just one second, please.
So the -- I'm not saying -- I'm not criticizing Dr. Rabinovitz for using that source of data, because Bates White used that source of data to supplement that Garlock analytical database. All the information that is on those

answers to interrogatories, is also part of the Garlock analytical database.

What I was criticizing was the way in which that information was used, because it was used erroneously.

Q. All right. Now when you cite to why her information is not up to date, a little footnote. Footnote three. Same page, Mr. Wolf.

Look at that. "Debtors further responses".

Now, the first responses were from 2012. What's the date of the further responses?

A. Is February 7th, 2013.

Q. When were the expert reports due?

A. February 15th, 2013.

Q. You're not suggesting that the information that the debtors updated here -- this is Robinson, Bradshaw, not you. In fact, Robinson, Bradshaw gave you this information at the same time, didn't they?

A. On February 7, yes.

Q. Yeah.

A. Yes.

Q. You're not suggesting that that updated information was something that only became known to the debtors on February 7?

A. I don't know one way or the other. All I know is that it was provided to Bates White on February 7. And it was incorporated on Garlock's analytical database. It was used

for the reports submitted in February 15th.
Q. And Dr. Rabinovitz didn't get that until February 7th?
A. Just as Bates White.
Q. Right. And they're interrogatory responses, it's not like everybody agrees that this information is accurate. It relates to settlements with plaintiffs. And there's a dispute between the settlements, whether those settlements took place or not, correct, right?
A. I wouldn't know one way or the other.
Q. That is fair. Now --
A. Because that criticism is, because there is a mistake in the code when she tried to include that information into her database. That's not about the substance of the information.
Q. Dr. Garcia, I understand that. We're not talking about that. What we're talking about are the cups right now. There will be plenty of chance for you --
A. I thought we were talking about the same thing.
Q. -- if we have time, and it's the debtors' choice as to whether they want to spend time on this or not.
Now, Dr. Rabinovitz got your analytical database for the first time when Dr. Bates filed his initial report February 15th, correct?
A. Correct.
Q. Up to that point of time it had been a secret database, hadn't it?

A. No, it was not a secret.
Q. Well, you didn't tell anybody you were preparing a different database? You didn't tell anybody you had five cups, did you?
A. Well, it's not a different database. It's just that we were using the information available in the case. I just don't -- there is no secret about that. Every single case in which I participated in asbestos, has gone through the same process. There is an initial database. There is more information available in the case. That information is considered for the database that's used in the analysis. And that's the database that we use. So there is no secret about it that's -- I would say rather standard proceedure.
Q. I want to call out to the court, so the court will have it, correspondence as to when we asked for this information. So we can figure out whether we were getting what we were asking for in a timely fashion, or whether it was being deliberately being held back, so when the expert reports were filed there was a cute little gotcha.

I know this letter didn't go to you, sir, but I want to just get it in the record.

July 26, 2012. This is a letter from my colleague, Kate Orr, here in the courtroom. It says, you want to focus on the first paragraph.

"We have completed our review of the debtors' responses

and objections. We have some additional questions. We are raising these issues in a letter in an effort to avoid the costs associated with our serving and your responding to supplemental discovery responses. We're hopeful that we can work together on these issues to reach resolution."

That's been our modus operandi for the last three years, and I'll tell you, it hasn't been very productive.

Let's go to the second paragraph.

MR. NEBRIG: Your Honor, I object. It's argumentative. He's not asking this witness any questions.

THE COURT: I sustain the objection.

MR. GUY: Your Honor, I apologize. This case has been frustrating at many levels.

"As you know, a critical purpose of estimating the debtors' present and future liabilities is to ensure that an appropriate amount of money is ultimately placed in trust in satisfaction of those claims. One important consideration in doing so is determining the amount debtors currently owe to present claimants as a result of settlements and judgments."

See that?

A. Yes.

Q. We're asking for that information in 2012?

THE COURT: You ever seen this before?

THE WITNESS: Not this particular letter, I don't think so.

THE COURT: I suggest you ask somebody that knows something about this letter, Mr. Guy. I don't think he knows anything about it.

MR. GUY: Well, if you let me put Mr. Krisko on the stand, I can.

THE COURT: Well, that's not what we're here for. This whole line, I mean, if you have some authority that says that one party's expert is required to give the product of its labor to the other party, maybe this will be relevant, but that's not my understanding of the law or in my experience in dealing with these kinds of cases as a lawyer or as a judge. I think they're entitled to prepare their own database, just like you all are.

MR. GUY: Your Honor, I agree entirely. They're perfectly entitled. But if the court's going to be able to compare the reports, it's standard practice as Dr. Garcia said, in this field, that the parties all be looking at the same data. They can prepare different reports, but they need to be looking at the same data.

THE COURT: No, I think he said that you all were given exactly the same information he was given on exactly the same day. Now what you do with that and how you compile it, what kind of database you make out of that, that's your own business. I mean, this whole line, for the last 20 minutes or so, I think has been -- well, it hasn't been terribly helpful

to me, because I don't think you have any legal basis for what you're complaining about.

MR. GUY: Your Honor, when we have on Dr. Rabinovitz, I think we'll be able to explain to the court --

THE COURT: The fact of the matter is, you're not comparing apples-to-apples. You both have different approaches. It would be reasonable that you have different ways of going about what you're doing.

MR. GUY: Your Honor, the fundamental part that we'll deal with this with Dr. Rabinovitz is simply this: The reports are different. They're not in error. They're different because they're using different databases, and the debtor has a different database. Simple as that, Your Honor. With that, I have no further questions.

THE COURT: That's fine. That's normal, and that's exactly as I would expect it to be. It doesn't sound like anybody short-sheeted anybody. You just got different ways of doing what you do.

MR. GUY: Thank you, Your Honor.

THE COURT: We'll listen to each other and see where we go.

MR. GUY: I think we made our point.

THE COURT: Okay. All right. Mr. Wehner.

CROSS EXAMINATION

BY MR. WEHNER:

Q. Good morning, Doctor.

A. Good morning.

Q. We've met before. My name is Jim Wehner. I'm here for the ACC.

Doctor, at the beginning of your testimony today, you said in response to something that Mr. Worf said, that even in aggregate estimation, there's no reason to ignore the details; is that what you said?

A. Yes.

Q. It's something you believe in?

A. Say that again, please?

Q. That's something you agree with.

A. Yes, I agree that you have data, detailed data, there's no reason for ignoring the detail.

Q. This big database that you have constructed for the Garlock case, contains information about the sites at which claimants had exposure; is that right?

A. Yes, it's got some information about that, yes.

Q. It's got information about the dates at which those claimants worked at those sites; is that correct?

A. That's correct.

Q. Now, you know that some asbestos trusts have something called an approved site list; is that right?

A. Yes, I do.

Q. In fact, Bates White has approved trust site lists in its possession; is that correct?
A. Yes. My understanding is that we have copies of the site lists that have been published by some trusts.
Q. These approved site lists are lists of sites that if you worked at them, a trust will presume that you had exposure to the product the trust is responsible for, right?
A. That's my understanding.
Q. In fact, Bates White can take those site lists and compare it to somebody's exposure profile and predict what claims they will make to trusts; is that correct?
A. Yeah, well, we have a person at Bates White, Mr. Marc Scarcella, does that type of analysis.
Q. Mr. Scarcella worked with you on this Garlock project, didn't he?
A. He had some role, but not significant.
Q. He worked on the part of the database that had to do with trust claims, didn't he?
A. He worked on the part of the database -- yeah, the part of the database that has to do with the parties that were -- the party data that was collected from the multiple sources, yes.
Q. Now, although Bates White has approved trust site lists, those aren't incorporated into the Garlock analytical database, are they?

A. The site lists?
Q. Yes. The approved site lists for trusts. They're not part of the analytical database?
A. No, they are not.
Q. You have not conducted an analysis of what trusts the claimants in the Garlock analytical database could make a claim to, based on the site information that's in the database, did you?
A. Well, we did some analysis of that. But the result was that the names of the sites were reported in a way that made it extremely difficult to be able to identify the site on any site list.
Q. When Mr. Swett asked you in deposition about this, and I'm looking at page 134 of your June 19th deposition, at line 12. Mr. Swett asked you:
"Did Bates White make use of any such trust-approved site lists in constructing its analytical database for Garlock?"
You said, "No, we did not.
"Did it make reference to any such trust-approved site lists for purposes of its analysis?"
And you said:
"No."
Did I read that correctly?
A. Correct.
MR. WEHNER: Thanks. That's all the questions I

have.

THE COURT: Mr. Worf.

MR. WORF: Very brief redirect, Your Honor.

REDIRECT EXAMINATION

BY MR. WORF:

Q. Mr. Gallardo-Garcia, I think the court understands the point that Jonathan -- Mr. Guy was spending time on. For the record I want to show page 136 of Dr. Rabinovitz's deposition. You were present at that deposition, weren't you, Dr. Gallardo-Garcia?

A. Yes, I was.

Q. And if you could expand the part that starts with, "By Mr. Cassada".

Q. "We had just finished up, Dr. Rabinovitz, talking about your methodology and the different steps in it, and you talked about the six steps. You also talked about the work that you did with the database, the deduping and all that?

A. Yes.

Q. What do you do with the data in the database once you're doing your report? Do you create your own separate analytical database?

A. Yes."

Q. Do you understand that Dr. Rabinovitz and Dr. Peterson had their own analytical databases that they constructed using

the Garrison claims database?
A. Yes. They -- on their underlying materials for their reports, they included copies of those databases, and they included the code that they used to construct those copies. And obviously as Your Honor was saying, that they used initially the Garrison database, but they ended up with something different from the Garrison database. Although with -- obviously with -- not with all the additional information that we considered.
Q. Did you receive copies of their analytical databases before they served their expert reports on February 15th, 2013?
A. No, we received them after they had submitted the reports.
Q. And like I said before, we will bring you back after Dr. Peterson and Dr. Rabinovitz have testified to talk about your points about their analytical databases.
Mr. Guy was also asking you questions -- I think he was using the phrase, how far in the past would you go, when you were doing the financial reporting work for EnPro.
Do you remember when you were performing those forecasts, that you used database prior to 2000 in order to calibrate the model?
A. Yeah, we used the whole history. That's what I was explaining before. That is not that you just do the analysis

with the most recent period of time, every single time. Because you need to understand what's the process that generates those claims, and what's basically the -- through data analysis, what is the -- what might be the most relevant portion of the history for use. So in that sense, you have to consider the full history.

Q. Did you-all use the pre-2000 data in order to help get a handle on the potential impact that trusts would have on Garlock's expenditures on asbestos claims?

A. Yes, in those -- so when we were performing that work, that the information from trust was not available, as we know because -- well, in the end we received that information through discovery in this case.

But to try to account for the fact that the trusts will have some effect on future settlements, one of the things we did was to look at the longer Garlock history in the 1990s.

MR. WORF: No further questions.

Thank you, Dr. Gallardo-Garcia.

THE COURT: Thank you. You can step down. Thank you.

THE WITNESS: Thank you.

THE COURT: Let's try to keep going until about 1:00, if we could.

MR. CASSADA: Very good.

THE COURT: Makes the afternoon go a little quicker.

MR. CASSADA: Your Honor, the debtors call Dr. Charles Bates.

CHARLES BATES,

Being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CASSADA:

Q. Dr. Bates, you've testified in this case before. Would you reintroduce yourself to the court?

A. Yes. I'm Charles Bates.

Q. By whom are you employed?

A. I'm the chairman and founder of Bates White, LLC, a Washington, DC consulting company, specializes in economics and econometric consulting.

MR. INSELBUCH: Your Honor, could he speak a little bit better into the microphone. I'm having difficulty hearing.

THE WITNESS: Is that better, Mr. Inselbuch?

MR. INSELBUCH: Yes. Thank you.

BY MR. CASSADA:

Q. You're a founder of Bates White?

A. I am.

Q. Could you describe a little bit more about Bates White's business and the type of work it does?

A. Yes. Bates White is an economic and econometric consulting company. It was founded by my partner Halbert

White and me. My late partner who died, unfortunately last year after a long battle with cancer.

He was my mentor at University of Rochester where I got my Ph.D in econometrics. Over the course of years, we had started doing work together on consulting projects at various times. When I had particularly tough analytical types of questions, or questions I thought would be of special interest to him, I would bring him into the cases.

Bates White was founded 14 years ago. We have approximately, at this point, say about 170 employees, for the summer we're closer to 200 because of the interns we have on staff. These are generally people between their third and fourth year of college come and work with us to learn about our business and we get a chance to look at them closely.

We are by reputation being a firm that specializes in high-quality large litigation work, particularly when there are large and deep analytical problems associated with what has been called in the press "big data".

We have, essentially -- we were informed recently by a consultant that we hired to help us figure out our strategic direction on our database and IT structure, that we have more of a database profile of Fortune 500 companies than a small consulting firm, because of our use and management of data.

The database that's been talked about in here, for example, in this firm -- I mean, in this matter, is actually a

relatively small database, relative to what we get when we're dealing with terabytes of data that are associated with things like credit card transactions, healthcare observations in data.

The firm incorporates six major practice areas, of which the work we're here on asbestos work is the environmental and product liability area.

Our largest practice area is in the area of antitrust, where we work on mergers matters. And in particular, have a fairly robust recovery practice, helping firms sue other firms to recover from price fixing matters that's actually the basis of the founding of the firm was the work that we did on the Vitamins antitrust case. And so the corporate finance practice, healthcare practice, general litigation, and also have a small but robust energy practice as well.

Q. Thank you.

Can you describe what we asked you to do in connection with this estimation trial?

A. Well, we had -- essentially there were three charges that I was given. One was to actually estimate and analyze the relationship between Garlock's settlements and its liability. This is an issue that's been well studied by economists over the years.

Secondly, asked to forecast Garlock's legal liability for pending and future unknown mesothelioma claims.

And finally I was asked to determine whether Garlock's proposed funding of $270 million would be sufficient to satisfy pending and future claims under the debtors' plan of reorganization.

Q. Did you form opinions on each of those three charges?

A. I did. First, with regard to the first issue, I found that Garlock's settlements are multiples of its legal liability. That's a term that's defined by definition given to me by Robinson, Bradshaw, which we'll address shortly.

Second of all, I found that those legal liabilities defined as Garlock's asbestos liabilities under the definition that they gave me, are less than $125 million net present value discounted at a 3 percent real discount rate, and in fact, it's very significantly less than that amount as I will discuss in my testimony today.

And third, that the funding is sufficient to satisfy the pending and future claims under the debtors' plan of reorganization.

Q. How much is the debtors' proposed funding?

A. Proposed funding is $270 million. I find that the amount of money required for that purpose is less than that, and gives a contingency for unforeseen circumstances.

Q. Thank you. Can you describe for the court the disciplines you brought to the work you have done in this case?

A. There's two principal disciplines. First one being economics. The economics here is -- comes -- is germane because we're dealing with the asbestos claims resolution, which has an economic process, which the parties make decisions based on their costs and their benefits. That is the study of economics.

We bring to bear on that, basic economics which comes into play, as well as particular aspects of it which includes things like special fields of law and economics where these issues of decisions regarding settlement and liability have been well discussed. As well as game theory which discusses the role that the various parties play when they're negotiating settlements. These are also well-studied fields.

The field of game theory's the mathematical field that I think was probably popularized in the movie "A Beautiful Mind" about John Nash and his discussion -- the movie there on that.

As well as -- in looking at this I also considered the fact that we have a system here of decisions that are made involving multiple parties. So some of the expertise, particularly in the area of general equilibrium theory, I studied in the past, informs my thinking on these kinds of matters. These are rather the subject area of matters which are covered in the economic area.

In this circumstance, and in particular we want to measure these processes, and that is actually the area of my

particular expertise, as well, which is the area I worked my Ph.D dissertation, econometrics being the subject about how you measure the economic processes, primarily based on real-world data.

Because generally, though there is a field of experimental economics, most of the data that you rely on is broad databases of real-world data. It's about the mathematical modeling of economic and financial systems, former journal called *Econometrica*, about the mathematical model building in that particular area.

And we used its model about how you do that to predict and model individual decisions, business decisions. When you say individuals, we mean here not just consumers and economists, but other economic agents, like firms, in their decisions. But to do that in a statistically reliable manner.

That was the subject of my academic research when I was an academician. That's what I wrote my dissertation on. That's what I published papers on, is that kind of methodology about how you do that. Taking account of the -- all of the issues that surround real-word data, the multiple dependencies and homogeneity of that data that you can't control for like you would in a scientific experiment.

Q. We'll talk more about that, obviously, as the day goes on.

Does the proper application of econometrics require you

to employ a scientific method?

A. Well, the field of economics and econometrics use that. In my work I deploy this daily, and it represents a lot of my approach to virtually all problems of which I work.

They start with basis of observation, understanding of the situation, but observing something. We get an understanding of the problem that we're addressed -- that comes through our observation. We form hypotheses about how those -- what might explain those problems. For example, here I can discuss several situations where I've done that. In fact, multiyear research programs related to relationship between nonmalignant claims and the underlying disease process or is it an economic process.

We go through the data collection processes as Dr. Gallardo-Garcia discussed here. The data collection processes done here, as I say, an integral part of what we do.

We develop models. We develop both models at the more general level, having to do with the model that I'm going to talk about here today, which has to do with the determinant relationship between settlement and liability that comes out of the literature of law and economics, but also more specifically in terms of modeling -- statistically modeling individual situations like the way verdicts may relate to underlying claimant characteristics and such.

Within that you use valid statistical hypothesis testing

as a way of knowing what it is that you're looking at, is this simply the result of random chance, or whether or not it's actually something that has a predictable association associated with it.

And then of course we work on validating the model, both through external observation, as well as statistical methods, as well as how it fits in with the what we know about the situation more broad.

Q. So did -- you followed a scientific approach or a scientific method in each step of your estimation work?

A. I did. I mean, it's integral to what it is I do and how I do it every step.

Q. Okay. Can you briefly describe your education and your academic background?

A. Sure. I started out as a mathematic major at the University of California San Diego. I was primarily interested at that time in abstract mathematics. Found that in my studies of abstract mathematics, that my teaching assistants turned out to be 16- and 17-year-old boys who were more math geniuses who worked on Navy NSA programs. So I looked for more of an applied field that I could use it in, got interested in the economics, because that's a field where you could actually do applied abstract mathematics in a more applied manner. I wound up taking the graduate courses at UC San Diego in economics which were mathematics based and got a

second major in economics as well.

From there I went to the University of Rochester to study with a famous general equilibrium theorist named Lionel McKenzie; given my mathematical background as well, his program of study that he had there, that seemed like a good place for me to go. I received a Master's degree in the field of applied general equilibrium theory called international trade theory.

And it was while I was there that I met Halbert White who was a new assistant professor there. While I was there, I became his first research assistant on his research into econometric methodology at the time period when he wrote a number of what are seminal papers and the most widely cited papers in the field of economics today, during that time period when he was there.

I left University of Rochester, I didn't really finish my dissertation right away, but through a few months on the road having to deal with some health issues, went and convalesced in San Diego where I worked with Dr. White finishing my Ph.D. in economics and taught at the department there, and then took the position as assistant professor at the Department of Economics at Johns Hopkins University where I did my research into econometric theory and taught courses on econometric and international trade theory.

Q. A little bit more on that.

Could you describe the focus of your education and research that you just described?

A. Well, I briefly touched on this in my background. My particular expertise in economics started off with a -- essentially a general interest in economic mathematical model building. I took mathematical and modeling courses from the mathematics department at UC San Diego which had segments on them in economics, so I got more interested in that.

Particularly went to the study that is the field of general equilibrium theory, which is about not individual decisions, but it's more broadly about how these decisions of multiple agents within a decision-making system like an economy interact with each other, and on a meta level, international trade and how those particular systems interact with each other, accounting for the interaction of the decision from the parties.

So, for example, it's not just about how a price might be formulated within individual markets, but how there are multiple markets and those interact with forming a general price system. There are elements of that in that study.

Then of course as I describe my expertise in econometrics, I believe I touched on that already, but in particular it's the application of statics and mathematics to modeling, to analyze the economic and financial problems.

In particular, much of what we do within the field of

econometrics, is try to get a handle and estimate things that are not directly observable, such as the impact that something like education may have on earnings, or the impact that race may have on job opportunities.

These are areas which are well studied in that field, but they're not directly observable, what effects are. You have to tease out the results through the myriad of a term we heard in this courtroom already, confounding factors. That's what econometrics is specialized in.

Q. Have you done research and published articles in the peer-reviewed literature regarding econometrics?

A. I have. This slide which I prepared here, shows the four articles that I've had published in peer-review journals. At this point the titles of them are rather daunting.

Q. And would you summarize your employment since you departed from the ivory world of education and academics?

A. Yes. I like to describe myself as a bit of a reformed academic, because I was involved with fairly abstract mathematical methodological research and I was essentially hired by KPMG in 1991 to help them work on figuring out how to estimate future asbestos liability as a part of a retention they had as part of the National Gypsum bankruptcy proceedings.

I found that this work was something that I really enjoyed tremendously. I liked being able to apply the

analytical skills that I had developed, and a lot of the computer modeling, both the simulation modeling that I was doing while I was at Johns Hopkins. I found that those applications worked in this application as well.

I rose quickly through ranks at KPMG to become the partner in charge of my own practice called the Economic Analysis Group.

I was briefly enticed away from KPMG to try and bring more quantitive and analytical methods to strategy consulting and operational consulting at A.T. Kearney. While I was there I was approached by a lawyer that I knew regarding a case that he was working on that was -- which eventually turned into the vitamins antitrust price fixing case, which was essentially to try and recover from several companies, European companies for domestic companies, such as Tysons and GMC. Companies had been buying bulk vitamins and had discovered that the prices of those were fixed in a cartel, primarily chaired by Hoffmann-La Roche. Hoffmann-La Roche was a big client of A.T. Kearney. So in order to do that work, I was not going to be able to do it at A.T. Kearney and it seemed like a good opportunity to step out and start a firm with Dr. Lange.

Q. Now focusing more on the issues that are before this court, could you describe your experience in estimating future asbestos-related personal injury wrongful death claims?

A. I can. As I mentioned before, I was hired at KPMG to

figure out how to estimate future asbestos liability as part of the National Gypsum bankruptcy.

At that time there had been a number of different bankruptcies and there was a number of different approaches that people were taking trying to estimate the problem. I had an opportunity working with the team there to start from a blank slate and work upward from that.

When I arrived there, one of the pieces of research that the team had already uncovered was from the work that was being done and published by Dr. Nicholson and his colleagues, and Irvin Selikoff and his colleagues, at the Mount Sinai School of Medicine relating to a particular kind of modeling exercise called a microsimulation model that's fairly often used in a lot of economic areas -- economic fields, to estimate what the future incidence of mesothelioma would be, based on the historical use of asbestos. That's an exercise, as I said, it's a microsimulation model.

What that meant was, that they would go out and they would estimate the populations of people who were exposed to the disease based on a lot of the research that we've seen in the science phase that was presented here about the relationship between the dose of asbestos, to the incidence of disease, the populations that were studied, and what the level of their exposures were.

And Dr. Nicholson and his team -- it sounds like a number

of those folks who were testifying in here participated in some of that initial research as well -- put together this comprehensive model that took estimates of the population through the 1940s, '50s, '60s and '70s, based on a lot of data that's maintained by the people like the Bureau of Labor and Statistics and others on the size of the population that worked in various occupations.

They formed estimates of the incidence of disease associated with those -- well, the incidence of exposure -- excuse me -- the exposure to asbestos within each one of those fields, based on their understanding of that, and then put it within a computer model which would statistically age the individuals through a simulation process. Where each individual would get a dose of asbestos from working in a particular industry or occupation, based on what their research was about how much they would get, it would age them a year. It would then use actuarial models relating to the likelihood of them dying of natural causes, versus what they call -- this is where the epidemiology part is, versus what they would be -- the likelihood that they would die based on their sort of cumulative exposure to asbestos and the length of time that it had been since first exposed.

That model was continued to run with additional -- through each one of the individuals within the population throughout time, until the last of them through an actuarial

basis believed to have passed away.

They had estimated there were about 27 million people in that population, for which that was the case.

I took that initial model -- we had coded their initial model that they had when I had arrived. So I took that model and built a more sophisticated computer program model version of that, and doing my own research went and visited with people at -- the researchers of the National Cancer Institute with Dr. Nicholson himself, with individuals that we've heard about talked about in this field, Victor Roggli and Bob Spirtas and Janet Hughes who have all done research in epidemiology, done research on them, asking them about their understanding of this model and how well it performed.

At that point nobody had actually tested the model in any way. So for the purpose of using it, it was natural in my methodology to test these things. And I discovered through the National Cancer Institute, a data source that would provide a good basis for testing the model.

So I built the model and tested it against what is called the SEER data, which is a cancer research program to basically accumulate as much data as they can about the incidence of the disease and various kind of disease.

And one of the disease categories that they developed in the '90s was a -- well, in the '80s, was actually keeping

track of the mesothelioma diseases that were there.

And so this gave a basis of testing the forecasts of his model to the incidence of disease.

Now, you don't have direct measure of the incidence of disease in the country as well, only a sample of hospitals around the country, hospitals which participate in the SEER program. You also have to use a statistical basis to estimate what the total incidence of disease is.

This was a fascinating research program that got started there because you have issues of whether or not the populations where the hospitals are, which are in SEER program, actually are representative of the populations of people with incidence of disease.

And when we first started doing the testing of it, it looked like the model gave us on the aggregate basis, a pretty good -- estimates of what the incidence of disease it was based on what we could tell within the variations we had, but there were some aspects that didn't line up very well at all.

In particular, when you looked just below the surface a little bit, it didn't line up with the age of the population of the people who had the disease, versus what the model predicted which was quite off. It turned out to be a dataset issue that they were using data from a limited sampling. And by expanding, sort of, from the datasets that we knew of our study of economics, and bringing in more relevant data we

could improve that.

But in doing this testing, so on, I consulted with Dr. Nicholson about that. He raised issues with me that have become, essentially, topics of essentially 20-year-long research program that I have done. How much of the incidence of disease was related to background. Because it was clear through some researchers that they couldn't find -- as Dr. Welch mentioned, they couldn't find the occupational history associated with the asbestos exposure which was associated with disease.

The incidence rates for women were too high, relative to the -- their population and the representations in the populations within the work force. So that didn't seem to line up very well.

He also had some updates to what he would suggest that we do with regard to the instance of -- excuse me, the exposure levels for some of the populations. He believed, for example, the exposure levels that they had for the automobile workers that he put in the original model were too high and he gave me an adjustment factor to those.

The other thing, of course, was that the populations were getting older and the people were living longer and it was necessary to expand the model back into the 1930s to actually capture the populations of people who were not representative of the model. Because this disease -- the other part of this

research was showing that the incidence of disease, and the increase in risk of the disease was that it was continuing to grow over the -- as the population -- as people got older and older.

So a number of these features came into the model. We decided at that point, we came up with a much better model -- in terms of its comprehensive thing, we had more detail associated, it was more finely granulated on it. But it still left some issues for us, particularly having to do with background population and reconciling the aggregate data with the -- what the model predicted at the time based on the research we knew.

At that point we decided that the best approach to use in the estimate done there to get a handle on the occupational exposure to asbestos was to use the adult males, the male population as opposed to the males and the females, and that was the basis of the forecast we did on that.

That model was -- the work that we did there was -- I talked at that time with folks like Dr. Peterson, and I know Dr. Rabinovitz has relied on that model as well. But I've continued to work on that through a research program. In particular what I --

Q. Excuse me. Does that model have a name?

A. Well, it's been called -- referred to as the KPMG/Nicholson model. I think that's a name that others have

given it. We just called it, essentially, the Nicholson -- the updated Nicholson model. But because, I think, through reference that's how it's become to be identified.

Q. So in this case the court will hear about the Nicholson model and some about the KPMG/Nicholson model?

A. Yes. And then we also refer to what we have as a Bates White version of that, which is based on our research, is more up to date based on the science that we have. And in particular, through this case, we've been able to expand that model in one important area through that research. But just to relate back and to continue with that just another minute with the research we did there, back in the 1990s the issue was not all about mesothelioma.

In fact, somebody -- a company like Garlock only had 10 percent of its expenditures associated with resolving claims in the 1990s was due to mesothelioma claims.

The big issue, from a financial perspective on this, was about things like the nonmalignant claims in particular. And that was, at that time at KPMG, a big deal trying to figure that out.

The trouble with that is, that they didn't have a model like Nicholson did for the nonmalignant claims. So the real question was, how do you model that process. That became another area of research that I've engaged in over the last 20 years. Which through the course of my work has led to some

interesting discussion -- excuse me -- some interesting results that really led us to show the importance of the economics in dealing with -- in modeling these situations.

At the time when we were doing it there, we were trying to model it -- at KPMG we were trying to model it as a biological process, and -- because these were claims that were essentially the result of prevalence of disease, and something that could be observed, but they weren't really leading to death. And at least in only a fair small number of cases as near as we could tell, and their numbers were growing.

And as I worked on matters throughout the 1990s, each time we went and looked at another set of data with regard to this, the number of those cases kept growing at a rate that went up year after year, which was not essentially predictable with any kind of a modeling process that we had seen before.

So when I started the company at Bates White, I now had more control over my budgets, and how I could dedicate some money and effort into doing this research. And we put some effort into trying to understand that.

One of the things that we uncovered through our work, particularly through my work with financial reporting was done through U.S. Gypsum, which gave us access to work with the claims data from the Center for Claims Resolution, which had rather detailed data on the sites. And the sites in which -- they kept track of the sites of where the individuals came

from when they made their claims, because they were a consortium of about 20, 21 different companies who would divide up the expenditures that they had, both from the defense basis and on the indemnity. And the way they agreed to divide the expenditures up had to do with what they thought would be the relative share that each one should pay to that.

And in many cases, you know, they had historically used what they had historically paid to the environment as a basis for doing that. But they kept getting claims from new areas that they hadn't seen before. And on the basis of that they would understand where the sites were that the claims came from, and whose products within that group came from those sites, and they would use that as a basis. So they had a detailed database of the sites where these workers came from.

And we, by looking at that site data, we discovered a very interesting pattern. We would see that, you know, for claims such as the large sites where you could get enough claims where you could see the mesothelioma claims, you would see a relative steady flow of claims that looked like a biologic process.

But the nonmalignant claims you'd see virtually from -- you look at the time period from where they came from, there would be virtually none and then there would be a huge spike in the number of these, and then it would go back down to

barely nothing and subsequently you'd see very little. Well these were the recruiting sites, that -- recruiting sites.

Well then it turns out that what was going on was, there were companies that were coming about that would go from site to site, and they would essentially do a -- essentially a recruiting site where they would set up a van to do screenings of the type that Dr. Welch was talking about in her testimony. And on the basis of those sites, they would collect -- sign up individuals who would basically form the basis of all of these nonmalignant claims.

And as that became a business that expanded throughout the country, it was essentially a process here -- an economic process was more akin to a gold rush. You would have businesses develop. They would have -- they would try and find these sites and get these sites before others would.

In some cases they had particular relationships -- particular law firms had relationships with unions in the area, and so they would have particular access to a particular site.

But that process we could track, essentially through looking at some of this data. On the basis of that we formed a new hypothesis about the way in which the nonmalignant claims were generated as an economic process through this business, in developing this business, as opposed to a biological process which was more akin to what we were seeing

with the mesothelioma claims.

Now the number of mesothelioma claims was increasing as well, but at a rate it just looked like we were getting a larger and larger portion of the disease out of the -- that was a known level of disease. As opposed to this process, which just seemed to be expanding as an economic process. We developed the prediction that it would not just be a process that would forecast -- that you couldn't just extrapolate this process into the future, any more than you could take the incidence of disease from the mesothelioma and the fact that it was increasing during this period of the '90s, just continue to extrapolate that into the future. You needed to understand the underlying process which was generating it so you knew what the future pattern was doing.

When you do that with a gold rush, you get the very predictable outcome that the gold-rush-type model, the economic model, which was that this would grow at an increasing rate until you reached a point at which there was nothing left to get, and then it would collapse fairly rapidly. Our research in this area was predicting that that would be the pattern that would occur. And in fact, that's exactly what happened.

In fact, about the time period when we were starting to do this research, was really at the period where it was reaching its peak. We didn't know that until several years

later because the incidence of -- the claims essentially fell -- came after that period. And we saw through the data we would get, we'd see where the original recruitment dates were -- diagnosis dates were.

Q. When was that, Dr. Bates, when you were --

A. This was in early 2000s. What was going on in the background at that time while we were talking about that, forecasts were being made, models that we were using, models that others were using, were predicting many more claims into the future.

And in fact, what was going on in the background was, that the number of these cases that were being recruited was dropping rather precipitously as the sites to which these recruitings that took place became exhausted.

So those were a couple of kinds of things that were going on at the time, and that's part of the research program that we have.

Now we've continued to maintain a bit of a research program on this. In particular, we have basically gotten more insight into the relationship between what is occupationally caused, and what is background mesothelioma.

In particular, through some of the discovery -- the research that we did as part of this case, we were able to actually build a better model there and came across epidemiology that allowed us to basically both combine, based

on some research that came about fairly recently, relating the relationship between the age of the claimant and type of model relating age of claimant and the likelihood of getting the disease independent of asbestos exposure.

So what we have done is used essentially econometric techniques which allow us to put both models into the same model. One would be a model -- essentially a Nicholson-based model with updated research on population, including populations that Nicholson did not include. Because he had both direct and indirect exposures -- excuse me. He had only individuals in his work force that were directly occupationally exposed. He didn't include bystanders and secondary exposure from take-home things. He did not include that in his model. So, you know, wouldn't expect it to be giving you the total number that you would expect of incidence of disease, but you got the background as well.

So now we have two competing models about how the incidence of disease could come back. So we used an econometric technique to put both of these models in and fit it to the SEER data, and it has allowed us for the first time to actually come up with what we think is the best estimate.

Now, the amount of disease, epidemiological, that's attributable to asbestos-related occupational -- but more generally actually, anything associated with -- whether direct or indirect -- associated with the use of asbestos in the

United States and how much of it is background.

You know, hopefully this fall -- sometime when we get time after this case is done, we'll be able to put that research out for review within the epidemiological community as a whole.

We also have done a lot of work on -- we spent a lot of money on research in developing models for the purpose of estimating insurance allocation.

Within this litigation there is a lot of controversy over whose insurance policy pays and when. That comes about because, of course, as Your Honor's heard, there's been a -- there's a long latency period between when individuals are first exposed to asbestos and when they get it. And when a company has their liability policies over a number of years -- and their product liability policies they have over a number of years, a lot of insurance law has developed over how those policies should all come into play. Then how much each one of them should pay toward any individual who essentially was exposed years ago, potentially has asbestos in them for all those years and gets the disease at some point.

And that has actually turned into a fairly -- a fairly robust field of litigation, having to do with which insurance company pays. And having those models and Charlie Mullin played a very instrumental role in building those models that we use at Bates White.

Q. Dr. Bates, have you published research in the area of asbestos litigation?

A. Yes, well published here in a different sense. This is not peer-reviewed publications because there are really no journals for doing this kind of -- that I'm aware of -- publishing the kind of research that we've been doing on the litigation environment itself.

Q. You're referring to Slide 12?

A. Yeah. Slide here which I have five publications. There's a sixth one that I think got left off my resume in 2008 that has to do with essentially an update on the litigation environment, more of putting out just some numbers that -- what we saw about the trends that were going on within the environment.

But this is a series of papers that's come out of the internal research that we were doing. Particularly started in mid-2000s, after the bankruptcy wave that Your Honor's heard talked about here. It became -- as we were participating in a number of these bankruptcies, became aware that the rules that were being written into the TDPs were going to create a potentially completely separate compensation system, that would basically pay claimants separate from their tort claims, even though the trusts were set up to cover, essentially, the share of the liability that each of these entities that had gone through bankruptcy proceedings were set up to pay.

So we came up with this rather nice catchy title of "Having Your Tort and Eating It Too", from one of the guys on my staff that came up with that, he was rather proud of it, so we used it.

Q. These titles are at least a little more provocative than your econometric publications.

A. Yes. Yeah, they are a little different. These were put in journals like the Mealey's publication that are more like commentary that we put out, as a purpose of just disseminating the work that we have done amongst the people who work within the field of -- work within this litigation -- companies. And I suspect some of those on the other side of the aisle have read these works as well.

And they came out of -- in many cases -- either the research we're doing or some came out of the controversies that -- questions that were raised, hypothesis, if you will, that were raised in various conferences at various times.

The one in the middle there is called "Show Me the Money" actually came out of -- result of some testimony that Dr. Peterson gave, I think back in the Armstrong trial where he was reporting on the amount of money that he thought that -- he was saying that the Dan Myers was saying could get recovered by individuals in the asbestos, mesothelioma claims would get in asbestos tort litigation.

So we were not able to have that -- get access to that

data. Through a rather spirited debate between me and a couple of prominent asbestos attorneys, John Cooney and Perry Weitz, about whether or not they would show me their data where they claimed what those numbers were. And so I had to do it and try and get a handle on it through indirect means, and that's where "Show Me the Money" came from in that paper.

The first two up there are the last two publications that we have out, and they were essentially tracking the changing and the pattern of naming that was taking place, the evolution of new individuals that were being named, and essentially their relationship between their tort claims and names of the trust claims that they would have.

The first one is in fact a paper that essentially outlined the techniques that Jonathan Guy was asking Dr. Gallardo-Garcia about a little bit today, relating to the work that Marc Scarcella does and how we can go about trying to figure out what the amount of money that an individual might recover through a use of site list based on work history. So we put that out in a paper in 2010.

And in that year we started actually getting -- individual companies would start to hire us for the purpose of seeing if we could help them figure out how much money the individuals would get, and what sites the individuals would actually have exposures to based on the approved site list and so on.

Conferences, I've been approached by a few plaintiff attorneys who asked whether or not we could help them with doing that work, and then they kind of backed off and said, well, maybe it wouldn't be a very good idea given the work -- who generally hires us.

Q. And speaking of professional conferences and gatherings, have you been a frequent speaker --

A. I have.

Q. -- to professionals involved in asbestos litigation?

THE COURT: Mr. Guy has something.

MR. GUY: Your Honor, maybe this will expedite things. We have no objection to Dr. Bates being qualified as an expert in his field. Where we differ is on the work that he did in his report.

So maybe this -- we can short-circuit through all the speaking engagements and everything else.

THE COURT: All right. We'll let you go --

MR. CASSADA: I'm sorry.

THE COURT: I'll let you proceed how you --

MR. CASSADA: I will take Mr. Guy's cue and move a little bit -- with a little more alacrity.

THE COURT: I'll give you a carrot. We'll go to lunch as soon as you get him qualified.

BY MR. CASSADA:

Q. So you've spoken quite often at a number of conferences?

A. I have.
Q. And you have been engaged as a claims expert in a number of bankruptcy cases as well?
A. I have.
Q. And are those listed on Slide 14?
A. They are.
Q. And you have been retained to do estimation work outside of litigation in the asbestos area?
A. I have. Particularly the work -- in addition to the type of work that we've done here, obviously we're retained fairly frequently in matters having to do with due diligence, which generally are private because of the nature of the transactions with regard to those. So there's no items listed there.

As I mentioned insurance coverage matters. But we also -- I testified in front of the Senate Judiciary Committee on the FAIR Act and the viability of the FAIR Act.

In that particular case, had found -- was actually the expert that came in with the highest number that was being estimated there, primarily because the FAIR Act essentially wound up -- would pay a lot of individuals -- we did the study of what the FAIR Act was constructed -- that it would pay a lot of individuals who would get lung cancer from smoking and not from asbestos exposure.

And the conditions of the FAIR Act, if you apply them,

actually, would blow through what was the proposed funding of it by several multiples.

We also do the work that's been mentioned here in financial reporting, and included on this list, of course, is a company called John Crane, which Mr. Swett made reference to in a number of matters here.

Q. Finally, do you have experience in the estimation area outside of asbestos work?

A. I do. We have done a lot of work, just investigating issues associated with tobacco, though have not provided any testimony in that area. But we've done a lot of research in that.

That is where I was an expert in a bankruptcy matter having to deal with a little thing otherwise called Diacetyl, a company called Chemtura, another product liability issue there. Diacetyl is the chemical which gives popcorn, microwave popcorn its butter flavor. I was involved with that in Judge Bridges' court up there and have dealt with issues relating to silica as well.

I've listed up here five bullets of cases that I've worked on and made mention of the vitamins price fixing matter, which essentially brought together a number of experts there to build, essentially what would be, at that point, the first and most sophisticated models for forecasting prices that would be in a situation but for the price fixing activity

was gone on by a cartel.

These are a number of different matters -- what's related -- what's common about them is that each one of them involved a situation where the particular application had never been used before. They're an application of economics and econometrics to rather large complex problems with lots of data associated with them. And there weren't established models that said, this is what you do. Because it's a problem. It's kind of a problem come about, but that's what I and my firm specialize in doing, that kind of activity here.

MR. CASSADA: Thank you, Dr. Bates.

THE WITNESS: To be expedient, I won't go through the details of it.

MR. CASSADA: Your Honor, we tender Dr. Bates as an expert in economics, econometrics and asbestos-claims estimation.

MR. INSELBUCH: Not wanting to stand between a judge and his lunch, I'll defer my questions to cross-examination and defer till briefing time, whether or not, whatever his expertise is, his report and his testimony is supported by science.

THE COURT: All right. We'll admit him as an expert in those fields.

Take a break for lunch, come back at, I guess, 2:05.

(Lunch recess at 1:04 p.m.)

(Court resumes at 2:04 p.m.)

THE COURT: All right.

BY MR. CASSADA:

Q. Okay. Dr. Bates, now that you're qualified, I want to turn to the first charge that you were given, and that is evaluating the relationship between Garlock's liability and its settlements.

Did you form an opinion with respect to the relationship between Garlock's historical settlements particularly during the 2000s and its liabilities?

A. I did.

Q. What is that opinion?

A. The opinion is that Garlock's settlements are multiples of its legal liability.

Q. Now you mentioned earlier in the day how you had drawn from the principles of law and economics. Can you describe what law and economics is?

A. Yes. Law and economics is a field that is actually the interaction between law and economics. It's essentially an economic analysis applied to legal issues. It's a well-established discipline. There are numerous journals and associations which are essentially both article peer-reviewed by both economists and lawyers, and got some rather famous ones at that. A number of associations, both in the United States and around the world which engage in that discipline.

Q. And you're referring to the journals and associations enumerated on Slide 18?
A. I am, yes.
Q. Has there been specific research and articles published in the field focusing on the very issue that you're addressing in your report?
A. Yes, it's been well studied and I put four articles which we referenced in my expert report which I listed on the screen here. Articles that go back to the time period of, first, Landes, and then Posner, in the period of early 1970s. The Posner article has been cited probably over 1,100 times as the judge -- famous judge on the Court of Appeals, and essentially a senior lecturer at the University of Chicago Law School.

And there's also the articles by Priest and Klein referenced over 2,000 times in articles and books, as well as a couple of other papers in '85 and '96 which we'll talk about in more detail. But these are prominent researchers, economists and lawyers who have worked on this area.
Q. And George Priest, he's the Yale Law School professor who's actually rendered an expert report for the debtors in this case?
A. Correct. I've read his report.
Q. What does the literature tell you?
A. Well, there's several things that I'm going to run through in terms of his literature. I mean, first of all, the

first thing to know is that, essentially that there is -- Posner, as he outlined in his article in 1973, in his "Economic Approach to Legal Procedure and Judicial Administration" -- that was a fairly extensive article -- but one section of it is on the relationship between liabilities to settlements, identifying that they're clearly not the same thing. And in fact, there's something that is well understood by practicing lawyers for a long time, but writing it down and they're engaged in this process of formally modeling the process and describing it in some detail.

He lays out in particular that what's important in determining settlements, is not only the parties' views about the trial risks and the potential jury awards which are important for understanding liability, but also the costs can be avoided by settling, instead of proceeding on to trial.

And particular the larger those costs are, relative to the potential outcomes of the verdicts, the more important those issues become. And that's going to be a very key issue here as described through the testimony of Rick Magee and John Turlik.

There's also other issues which is not just the hard costs that matter, there's also issues that the individual's attitudes toward the fact that the legal process takes time, as well. So a settlement that occurs now matters. So there's a value to the time saved by going through settlement instead

of proceeding through the litigation.

There's also the attitude that each of the party has towards risk. A trial outcome is not a certain process in either party. It's an uncertain outcome. Dr. Peterson recognized that in his report and described about the likelihood of mediating outcome, the risk of trial when a plaintiff takes a case to trial.

There's the size of the award. You run the risk of either on one side a very large award which has its own costs associated with it, or, you know, a -- for the plaintiff, a very small -- small award. So there's just the size of the award. It's not just whether you win or not, but the size of the award matters a lot. And our study in this reveals that there's a wide variety of potential outcomes that potential litigation can have.

In 1984 Priest and Klein, I think, wrote some articles on this. And in particular they were talking a lot about the difference between cases that went to trial versus the cases that settled. And they developed in their article, fairly formal model of the litigation decision.

And essentially came out with the following quote, which I thought was particularly germane in this issue, "according to our model, the determinants of settlement and litigation are solely economic, including the expected costs to parties of favorable or adverse decisions, the information that the

parties possess about the likelihood of success at trial, and the direct costs of litigation and settlement. From this proposition the model shows that the disputes selected for litigation as opposed to settlement, will constitute neither a random nor a representative sample of the set of all disputes."

That's particularly important for my undertaking here where I'm attempting to estimate and set out to estimate the legal liability of Garlock, based on the data that we have, given that we have information on verdicts, and the history of verdict. But it's relative to the total volume of cases we have. It's a relatively small volume of cases.

This is -- addresses this on Slide 20 here. But I've also made reference at the bottom, and I do on several spaces throughout this, make reference to where in my report I make reference, and describe much of what I do here in more detail.

Q. Okay. Turning to Slide 21, does the literature say anything about whether settlements can occur even in cases where no liability exists?

A. Yes, it does. This is an area where -- on relative terms is more recent -- a discussion about why it is that settlements might occur in cases where the plaintiff himself doesn't actually have a prospect of having a positive outcome of going to trial.

There's a lot of discussion within this literature on the

gain theory side on whether or not it even makes sense to talk about outcomes where the plaintiff doesn't have the prospect of a positive outcome, given their cost of taking the case to trial or not.

The articles -- the authors in these articles showed that -- particularly the Rosenberg article, as well as the more formal process of how that might occur in the Bebchuk article, show that, you know, a plaintiff who has no chance of winning at trial, can credibly threaten the defendant and obtain a positive settlement amount. And there are -- some of the dynamics in this case I think, which make that a particularly suitable analysis which I'm going to talk about a little bit later.

Basically, what they can extract from that process, is a settlement up to the cost of responding, just solely to avoid the cost of responding. And I think you heard, both in discussions from Turlik, as well as from Rick Magee -- Mr. Magee, that these were significant considerations for Garlock.

And certainly in my discussions with Paul Grant at Garrison, as well as the other attorneys who work with us, that these were significant considerations, given the large volume of cases they have, the cost that it would take Garlock simply to respond to the large number of lawsuits they have.

And I think that we'll find that this, for example, drove

much of the litigation, and the cost of the litigation in the 1990s in the -- much of the nonmalignant claims. And we'll see that it's a very significant role here as well for the vast majority of claims.

Mr. Magee mentioned about the percentage of cases that were settled for amounts less than $25,000. These are cases that basically are -- clearly fall into the category of cases that we're talking about here, because any part of the litigation at all is going to cost much more than that as we will see.

Q. Now, what does the literature tell you about how to evaluate the relationship between liability and settlements?

A. Well, I think to describe this, it might work better if I came down there, if it's all right with you.

Q. Sure. That's permitted. We've done that in this courtroom.

A. Thank you. I have to see where I can stand here where I can both see you and them, try to stand out of the way a little bit here.

Your Honor, we've seen this before. This was in Mr. Magee's slide, as well as in Mr. Cassada's opening. This is part of the equation of what the law and economics literature tell you about resolution of the determination of settlements.

Particularly on the left-hand side of this is essentially

the part -- left-hand part of this, these are the components which essentially -- in figuring out whether or not it wants to try and settle, versus take a case to trial, is going to try and handicap the outcome of taking the case to trial. And on the basis of that, they're going to try and figure out what the compensatory awards are, and what would be their share of this award. They will take other considerations as well.

For here we have focused our attention solely on the compensatory awards part of it. As well as the likelihood of success. And these parts are essentially what the literature describes as being the expected liability associated with taking a case to trial.

So we could expect, for example, if there was -- this compensatory award was perhaps facing the prospect of $100,000 and you had a likelihood of success of 10 percent, then this value here would be $10,000, is what you would get.

And then here, what we have is, as well, is what the defendant's avoidable cost. That is, what is it that I can save by settling now, instead of proceeding on to the case either to trial or through further litigation.

Those costs are what I could avoid. Here those costs could be things like discovery costs, the actual cost of the lawyers taking a case to trial, experts and so on.

As is pointed out by the literature, it clearly makes sense that the highest amount the defendant would be willing

to pay, would be in fact no more than the combination of what it expected to pay from the liability, versus the avoidable costs, and that would be the highest settlement offer.

Clearly, this is a simplification of some of the costs because the issues of risk aversion and the issue of what the downside could be on a particularly bad outcome can matter. But this is a basic description of that process.

Oops. That was the wrong thing to hit.

That is only half of the determination of what affects the settlement. The other half of the equation is the other party bargaining on the settlement. So a settlement is essentially the bargain between the plaintiff and the defendant over settling the case and resolving the case instead of proceeding on to trial.

The defendant -- the plaintiff has his own valuation of what the compensatory award would be. So it has its view on what that could be, and to the extent that they have competent professionals on each side, you would think that they would have a fairly good idea of common view of what that potentially would be.

They also have a view of what the likelihood of success would be. All right. That matters.

But in addition, the structure of settlements in this particular matter is such that we have a different component to them. We also have the fact that for most cases of this

type, product liability cases, that the lawyers by the plaintiff are paid through a contingency arrangement where the plaintiff has to pay the amount that they pay to their lawyers, not based on the time they spend, but whatever the outcome is they get a percentage of it.

They also have costs that can be avoided by going to trial. Obviously they have to pay their lawyers a contingency fee whether they settle or go to trial, so that's not avoidable.

But the costs that could be avoidable are the direct costs of going to trial. The time of delay would be associated with that. But in the end, they also have an amount that would be the lowest amount they would take to settlement.

And to the extent that this amount here is less than this amount here, you would expect there to be a range over which they would have to bargain to get a particular outcome. That's where we bring in, essentially, the gain theoretic part of this, which is to say, where do you expect to see -- given this range of possible outcomes, where would you expect to see a settlement.

And in the simplest example of this, you would expect to see a settlement accounting for all the kinds of costs that you have on both sides of the parties, the competent professionals on both sides, you would expect to see

essentially an outcome that is about in the middle of the range. That's what the economic literature predicts for you on this.

Q. Let me ask you a relatively obvious question, at the risk of being redundant, but what would happen if the defendant's highest settlement offer were below the plaintiff's net acceptable settlement? What would the outcome be?

A. That would be a case that would go to trial. I can actually maybe draw a little diagram on the easel now?

Q. Sure.

A. Just to illustrate the point. Do it off to the side so we have it. If you think of the equation where we have the likelihood of success -- and I'm going to put two axis here. I'm just going to put here the defendant's view of the likelihood of success for the plaintiff. And I'm going to do the same thing here for the plaintiff, likelihood of success.

And if they have common agreement on this -- when they're both the same, you essentially have a 45-degree line. Because that's where on this, regardless of which they think the outcome of success is, as long as they agree on it, then they would both have the same assessment. This would be bounded by one -- 100 percent. That would be here as well, so that would be 100 percent.

Now, with regard to most -- the settlements that you would see, because the settlements occur, for the most part

you would expect to see these settlements all occur, essentially if I take all the various cases we have as dots around this line, they would be, perhaps not exactly on it, but they certainly would be close. And we would expect to see numbers with them.

What happens if essentially their evaluation -- we have a combination which is off this mark? Well, if it's up in here, this would be a combination where the defense thinks its likelihood -- of the plaintiff's likelihood of success is high, but the plaintiff has a low evaluation.

In that case you're simply going to get an outcome where the plaintiff basically gets a windfall because the defendant is going to settle even though the plaintiff doesn't think he has much of a chance to win.

A case down here, is a case now where the plaintiff thinks he has a higher likelihood of winning than does the defendant. And so long as it's far enough, the difference between those is enough, this is a case that would go to trial.

So cases that are essentially a disagreement, and that comes out of the literature that we had from Priest and Klein, the literature would be such that these are places of terms of the likelihood of success that you would expect to see when there is -- of the cases that would go to trial. So by definition, in some respects, they are different from cases

that settle.

Q. So you talked about the importance of avoidable costs in determining settlements. Are plaintiffs' and defendants' avoidable costs in asbestos litigation the same?

A. Well, there are some elements of them the same, but they also have differences between them. I think I made references to it in the other -- on the prior slide.

Essentially -- we have, essentially, on the defendant's side, they pay their lawyers by the hour. They can use various combinations of ways to do that, but attempts to try and put some arrangement on that is somewhat contingent, but it's really hard to do.

They pay their attorneys by the hour, and when they settle they save all those future costs. They have those costs through summary judgment. They have the costs that go through trial, at trial. They have costs for appeals. They have costs to obtain co-defendant contribution. They have costs associated -- if they're making an appeal, of money for bond, posting bond should they win to try to take cases through appeal. That's been an important element a couple times in trials for Garlock. They have costs for experts, and then they have other trial expenses, incidental expenses.

These last two are costs that they both share, both the plaintiffs and the defendants share. They both have experts that they have to pay for out of pockets and they have other

trial expenses.

The plaintiffs, on the other hand, don't pay for the lawyers directly out of -- by the hour. They pay the lawyers whether they settled, and -- or whether they go to trial, the lawyers get a percentage of whatever the take is.

They do, however, have perhaps -- I've heard it mentioned a number of times, they have particular costs, emotional costs of attending the trial which comes into play here. Reliving the experience, in particular, an emotional situation, is something that could be taken and should be taken into consideration.

And of course the time value here, which in their case the time value is the delay in getting paid. For the costs on the other side for the plaintiff -- for the defendant, that's not a cost, because they actually keep the money that they would otherwise lose in the settlement, but they do have to pay the other costs.

Essentially, the contingency fee arrangement between plaintiffs and their representatives, plaintiffs cannot avoid the lawyer costs by settling, and that's a key element of this litigation.

Q. Can you describe an example of disparity in the cost of defendants and plaintiffs in a specific case?

A. Yes, I mean, this is an example I've taken from some actual bills in a case that was provided to me by Garlock.

This is a case that has been mentioned in court, I won't mention the name of it, just simply because of the privacy concerns issues. It's talked to in my report on pages 83 to 91. This case I got the detailed daily bills for most of the costs involved with this.

The blue line -- what I've done with those bills, I've constructed -- in fact, gone to the end, figured out what the total bills are, then going back through time figured out how much they could have saved if they had settled on that date.

So this is a trial that's case had essentially -- was scheduled for trial around this period, and proceeded to trial on the 17th of April, and then concluded several weeks later here into May.

So what we're measuring on that side here, is eventual bills for the case. This case settled here, as was discussed earlier in the hearing. This case had bills that were in excess of $500,000. So on each of these dates, what we see from the blue line is how much the defendant would have saved by settling on that date instead of going ahead and proceeding to trial.

Now, I don't actually have the bills for the plaintiffs. That's not something that was given to me. But what I've done is, to create a constructive proforma is, I've abstracted from this the part of the bills that are not associated with the lawyers' time. So the expert's time and the other bills and

treated them as being the same on both sides.

Because as we've seen through bringing the experts here, I don't think there's any particular reason to believe that the experts on one side, that kind of cost on one side are different from the kind of costs on the other side. So I've put that into this equation here.

What you can see then through here at any particular point, I've also listed trial detail, is the amount that the plaintiff -- the defendant could save by settling it in time.

So we have here, essentially, about $50,000 in plaintiff's avoidable costs. By the way, I have other -- I think evidence that basically indicates that these are a pretty good indication of what the plaintiff's costs actually are.

Some of the lawyers for their own marketing concern put them on their web sites telling about what the costs were. They give the outcomes of the trials. That's one of the things they give you.

So we have here about $50,000 in costs. We have up there nearly -- somewhere between 550 and even before the trial starts, about $430,000. That's about $600,000 to $500,000 in expense that can be divided up between the lawyers, the plaintiff and the defendant, rather than taking the case to trial. So that starts off with a big pile of money, which if nobody settles is going to get consumed by this.

Q. Is the contingency fee the only reason avoidable costs are different for plaintiffs and defendants in asbestos litigation?

A. No, it isn't. I think as that example showed, there's a significant asymmetry between the costs. The costs that can be avoided in this case are much larger for the defendant than they are for the plaintiff.

Then there are other elements of this case though -- these cases which are structurally such that the avoidable costs are different between the defendant and the plaintiff.

I've got two examples of this and how this works. One of them is the fact that typical mesothelioma claim as we know from talking from the data that we've collected in this case, as well as our information we have more generally, is over 50 defendants on the complaint. Plaintiff depositions typically only include, with one or two for the plaintiff, but the defense attorneys will have multiple defendants there.

If you look through the complaint and look through the depositions, you'll see the appearances by the attorneys for the defense side they can go on for pages, they have 10, 20, 30 of them at times goes on for pages, depending on whether they share attorneys. Plaintiff only has one or two.

There are multiples of costs that will basically be replicated by each defendant who has to go through his own expense, and has to be ready to litigate the case on their

own. So they cannot depend and don't depend on the other attorneys. They also have conflicting issues, so they have their own attorneys involved with it. So there is essentially a multiplication of the costs on the side of -- the defendant's side which is not there for the plaintiffs.

In fact, what that means though is that for the plaintiff if he has -- if he's litigating against multiple defendants, the plaintiff can only avoid his future costs of any significance, if the last defendant is leaving the case. If there's other defendants in the case, even if the Defendant 17 settles with the plaintiff, there's still the rest of the defendants that have to go -- the plaintiff has to pursue. So they still have their basic litigation costs, even though it's settled with that particular defendant.

There are also particular docket management rules that basically can make the cost -- I think even exaggerate the cost asymmetries, particularly when multiple cases are scheduled for trial ad seriatim.

I think we had an example of this yesterday when Mr. Finch was up talking about -- he wanted to know who the expert witnesses that Garlock would call on defense were. And he wanted to know whether or not it would be only two of them, in which case he didn't have to prepare for eight -- create cross-examinations.

Whereas, you know, that kind of example here about saving

time and saving costs works even more in the case of -- cases, for example, of a docket like in New York where they have a trial docket and they will place 10, 20 cases ad seriatim. Though those cases will proceed to trial, the defendant has to prepare for each one of them. He doesn't know which day which one will come up. Alls he knows is perhaps the order in which they come to trial.

So he will go in the first day and find that in fact the plaintiff has dropped the first two and he has to start the third one. And then they do the third one, and then he finds out that he's dropped the next three or four and he has to do the fifth one, and it follows right on the heels of the first one. So he's put in a position of having to prepare for a greater number of cases than he would, if the cases proceeded, you know, in a more structured, scheduled manner.

So, in particular, the defendant has to pay in this case to prepare for all trials, all scheduled cases in the trial group, because they can begin with little notice. But the plaintiff firm knows which ones they will be using. If they're going to let defendants out, they can target the cases, which is what they do.

Q. Turning to Slide 26. Can you describe an example of the analysis that you would undertake to determine the expected outcome of a Garlock case with potential for trial risk?

A. Well, this is a graphic which illustrates the model that

I just described. We've had the top -- these are -- I've got two of these that I prepared. One of these is for cases which are cases which look like the kind of cases for which Garlock has trial risk. Those represent, as my analysis will show and I'll talk about a little bit later, about 5 percent of the cases that Garlock paid in the 2000s.

So this is an example here. So the type line here, the blue part of this illustrates the part of the chart that we showed before with the description of the model with the words on it.

So the top line is the one that Mr. Magee showed you, which in this particular case we have the example of a case where there's a potential trial risk of $100,000. So that's what's illustrated here on this part. So the axis here measures the dollar term. So we have the far left-hand part of the model, we have outcome $100,000.

So, for example, if we had a $2 million potential outcome and a 5 percent chance of getting there, we have $100,000 potential expected liability.

But the cost of taking a case to trial, looks like -- the costs looked like, perhaps at the eve of the trial, of a case that I showed you before, which has the costs of potentially $430,000.

So that defendant here, Garlock in this particular kind of situation, is essentially -- faces the prospect of -- by

its evaluation, it has handicapped this situation as being $100,000 expected liability. Trial costs potential of $430,000. So it basically sees an expectation of an expense of about $500,000 -- $530,000 it anticipates to take the case to trial.

The bottom side of the chart here is the range for the plaintiff. The plaintiff, what would be an acceptable plaintiff -- to the settlement -- the settlement to the plaintiff.

Well, clearly they wouldn't mind having any amount out of here. But what's the lowest amount they would pay? Well, if they have a common expectation of getting $100,000 potential outcome. Well, that individual plaintiff basically looks at the prospect of getting, you know, $100,000, plus it has $50,000 avoidable costs associated with this.

So it has -- since it's basically going to get, out of this, if it has a 35 percent contingency rate, it's basically going to get this amount, which is $100,000 in outcome, it's going to have to pay $35,000 to the lawyer. It's going to have $65,000. If it cost $50,000, either between hard costs or between emotional costs or some combination of them, it really only faces a prospect here of about -- taking the case to trial of about $15,000 as an outcome for this kind of case.

The model, however, would tell you that there's the range here between what is the plaintiff's minimum acceptable

amount, which is around $15,000, up to the defendant's maximum amount, which is about -- over here, which is somewhere in the neighborhood of $530,000.

So this is the settlement range. This is what they are bargaining over. In the literature that's something they would call the core. So we're bargaining over this amount. And where in that range will they come out.

Well accounting for the contingency rate that the plaintiff has to pay if he gets a settlement, you would get an expected settlement out of this which is about $330,000. It's not literally in the middle of this range, because you really have to account for the middle of the range between what the plaintiff would gain, versus what the defendant would have to pay, and split the difference between them.

When you get that amount here, it's about a $200,000 gain to each to settling at $330,000, instead of taking the case. It's a $200,000 gain to each, to settling the case. And it's at $330,000 instead of proceeding to trial.

Q. Turning to Slide 27, can you describe an example of the analysis of the expected settlement outcome of a Garlock case with no trial risk --

A. Yes.

Q. -- one which requires some expense to obtain a dismissal?

A. Correct. So as we saw in the case that we had there, even if -- the example where I gave of the trial case.

Suppose that the plaintiff had no prospect of winning that case but it cost the defendant $65,000 on average to take the case through to trial to prepare.

In that case, even though the plaintiff has no chance of success at trial, if it can force Garlock through essentially, just if you will, delay, and if Garlock wants to get out of the case, and it has to go through the discovery to prepare for the case, this might be the case. After all, the outcome of the case is not simply dependent on -- it doesn't just happen. The outcome of the case is dependent on how much Garlock prepares, as well.

So the plaintiff has a chance to observe whether or not Garlock actually does much to prepare through the litigation process, the competency of its attorneys and so on.

So Garlock has to prepare, and if it faces the prospect on average of about $65,000 to litigate to the point where it is clear to both parties, and clear to some other outside agent, such as the judge, that they're going to get out of the case so it doesn't have to spend anymore beyond that, then in that circumstance, the plaintiff obviously be willing to take anything to settle that case, but the expected bargain out of this is again, taking account of the contingency rate here, you expect it to be somewhere in the neighborhood of splitting this amount, if you count contingency rate as an expected outcome of about $37,000 as being the expected outcome. This

is what is typical for 95 percent of cases which Garlock settled in the 2000s.

Those costs were a lot less in the 1990s, as we saw from John Turlik, from his description of what's gone on here, as well as Mr. Magee. In the 1990s the plaintiff was putting on the case against the insulation contracting companies as defendants in the tort case, identifying them and putting on the case for them.

Generally Garlock would face the cost prospect of simply taking the case through deposition, doing an initial workup to find out that it really faced little prospect of taking the case farther and beyond in the litigation, and would be sufficient to get it out of the case in many cases. And as a basis of that, it really faced the prospect of somewhere around 5-, $6,000 in cases -- for most of the cases that it faced. And on the basis of that, you would expect to see an outcome somewhere in the neighborhood of about 3,000, to $3,500.

Going through the bankruptcy wave, however, the plaintiffs stopped -- as we heard from testimony here -- plaintiffs stopped educating or espousing the insulation companies as the source of their exposure.

They, essentially, in many cases, would continue to describe them in the depositions. But in many cases Garlock had to do the work instead, as described by the plaintiffs as

what is the obligation of Garlock to do in the cases when the plaintiff no longer would do that.

And it's the cost of doing that work that matters. That's the cost that basically drives the cost to Garlock up of defending these cases and taking to the point where it has established enough of the discovery record, and enough litigation that it can actually face the prospect of establishing that it has no liability in the vast majority of the cases that it faced.

That increase in cost is approximately from a few thousand dollars, basically almost $60,000 on average increase in cost, which had a tendency -- I've been through the model as we would expect to see the average settlement rise from somewhere in the neighborhood of 3-, to $4,000 to nearly $40,000 to pay on these kinds of cases.

Q. Could you describe your evaluation of the reasons Garlock's settlements increased from the 1990s to the 2000s?

A. Well, I can. First here, this is a chart which essentially shows the changes that took place between the 1990 -- this is my analysis of where they were. Did you have the pointer? I'll use that instead of standing up in front of what we have.

So this is a table of numbers. So let me take you through it a little bit. This is the application of the model to the analysis of the settlement data of Garlock. I covered

this in my rebuttal report on pages 67 to 73.

Q. We're on Slide 30 now.?

A. Yes, this is Slide 30.

Essentially I divided the cases into two categories. It's a slightly different division than Mr. Magee used in his analysis, and it's a slightly different analysis that I did in my affirmative report in that I segmented the cases slightly different. And that's the result of some of the work I've done in between doing the rebuttal report and doing the analysis of settlement data which revealed that this division was a useful one for this purpose.

Put the top part here refers to the 95 percent of cases for which there is no trial risk to Garlock. And I'll show you the analysis by which I determined that.

That represents in both cases, like I said, the vast majority of cases. In the pre-2000 period, there were nearly 6,000 of those cases. They settled on average $3,300. Garlock saved on average about $5,600. And it had little to no trial risk, not detectable. I don't want to say it's zero, because statistically we can't actually measure it at zero. It measures at zero, but it could be marginally above that.

The tests I've shown that it does not -- the analysis I've shown that it does not have to be much above zero. In fact, it could be .03 percent, unable to detect it through this amount of data. But, so it really would have to be very

small indeed for us to not be able to detect it.

For those cases, the cost of defending -- essentially the average settlement went from $3,300 up to $37,000. We had, again, vast majority of these cases -- these are, by the way, are only the paid cases of Mr. Magee and his analysis which included zeros in it. For this analysis I only have just the paid cases.

That is equates to -- as I showed you before -- an increase from 5,600, to $65,000.

What this part of this is, these are the 5 percent of cases for which they are detected actual trial risk to Garlock through the settlement data. That represents two to three dozen cases per year. These are the cases that Garlock paid attention to. That's what the focus of the attorneys on the defense. It's what preoccupied the time of Mr. Turlik, Mr. Magee, Mr. Glaspy, Paul Grant. Their time was dominated by dealing with these cases.

And in particular, going through the bankruptcy wave, several things occurred to them. First of all, their trial costs that they faced went from $63,000 on average prior to the period of 2000, up to an estimated average of over $430,000.

Now this is the amount that they saved, relative to the amount that the plaintiff saved.

So this is not absolutely a number that -- and I can

clarify that, but discussed in my report -- it's actually the amount over and above what the plaintiff saved in cost by settling instead of defending.

However, it wasn't just an increase in settlement -- in defense that drove the increase of the average settlement which went from $36,000 to $335,000 for this case. It actually was also a mixture of two other factors.

Part of it was an increase in trial risk. So for these cases I detect a trial risk that is in the neighborhood of about 7 percent. So in that settlement model that I had over there, the liability likelihood from the plaintiff was about 7 percent for this 5 percent of the cases.

And the aggregate expenditures, the net potential award -- the total potential award, not net -- total potential award was $2.1 million. Now that's not Garlock's share, that's the total amount of the verdict potential on the case. Garlock would share that amount if it went to trial if there were other cases and there would be offsets against that if there were settling parties, as there usually were.

Going from the 2000s to the period -- from the 1990s to the 2000s, Mr. Magee described for you the risks they faced, and the settlement data reveals that as well. They increased from 7 percent on the trial risk cases, to approximately 17 percent. So there was nearly two and a half percent -- two and a half fold increase in the liability likelihood going

from the 2000s -- from the 1990s to the 2000s.

At the same time there had been an increase in the potential verdict amounts. That's been an interesting study to understand why that occurred. And there's been some hypotheses, various publications on why that amount increased. But it definitely took a distinct step-up from the 1990s to the 2000s.

My hypothesis being in one hand, that could simply be the result of essentially what amounts to *Daubert* revolution across the country. That cases had to be more better prepared and they were better presented. It could be a selection of which cases actually went to trial. Both of those have had ramifications for this litigation.

The scope of understanding why that step-up occurred, but it was beyond the scope of what we did here. And we simply accepted it for the purposes of our analysis that the step up did occur as we measured.

So those are the changes that we have -- I have figured out by using the settlement data and the model between relationship between liability and settlement.

Q. Let me ask a question. I'll let you keep control of that for a little while and I want it back.

But how do you know -- I mean what's the analysis that you undertook to determine the variables that you described on Slide 30?

A. Well, there's a distinctive pattern on part of the elements of the settlement model -- of the model that helps us understand and figure out which part is which.

And so remember, this was the model here, again, which we developed for use of this purpose, and over here we have this amount here, which is the compensatory share amount.

So what we can figure out what that model is. We're trying to figure out how much of it is represented by the parts here in the blue boxes, versus how much of it is represented by what's in these boxes, the avoidable costs.

Well, the point about this part over here is that we know that these amounts here, particularly these amounts here, are distinctly affected by the age of the claimant. Damages are affected by the age of the plaintiff. Whereas the costs that they face and they avoid are not affected by the age of the plaintiff.

So what I have here is show you a graph of how that pattern is. This is our estimate of what the potential compensatory damages would be for current claimants.

So to construct this, we use -- and I'll talk about this a little bit more later. But we used observations on verdict amounts related to the various claimant characteristics, and particularly the age. And a pattern that comes through in this data quite strongly, is that these verdict amounts, the potential verdict amounts as Mr. Magee mentioned, varies

strongly with age. There's a lot of variation between them. But the pattern related to age is a very strong measurable factor.

Well, the costs that are avoided, don't vary by age. How much it costs to bring a case to trial and prosecute it, don't actually vary by the age of claimant.

So knowing how much the settlements vary by age, as distinct from how much they don't, basically knowing how much the verdicts move by age, versus the fact that the defense costs don't, allows me to tease out through the econometric analysis, how much of it is attributable to the portion on the left, which is due to the compensatory expected damage award, versus how much of it is due to the defense costs.

Q. You're now on Slide 33?

A. Yes. Slide 33. So I told you about the two segments of the way I segmented the data. In the 2000s that segmentation where you get the 95 percent, not 5 percent split, occurs at about $200,000.

Now there's described in my report the analysis of how I came up with that $200,000, so I'm going to show you the result of that here.

But how I came up with that $200,000 award is a matter of several different steps which I tested on some hypotheses. I used statistical measures which gave me a reliable measure of the breakpoint between the values for which I saw phenomenon

of this kind, and the ones where I don't.

What I see here though is, here's a chart which shows you what the average settlement is by age for claimants who settle their claims for less than $200,000. Down here we have the average for the claimants who are less than 56 years of age. And up here are the ones greater than 86. And this just gives me the average amounts.

Now the actual data on this looks a lot like the other chart we had in terms of it being a lot of individual points. After all, there's about 6,000 of these points here. So I've summarized it by these blue bars with just an average in each one of those age pins that I have here across this.

Q. Before you go to the next slide, in the middle of the graph there it says, "age coefficient and confidence interval".

A. Right.

Q. Can you describe what that is?

A. Right. So what I did with regard to all of that data is, I estimated the regression relationship, again, controlling for the other factors in the data, like what state they belonged to, and whether or not the individual was alive or dead at the time the case was filed.

I estimated what the impact of age would be on settlement amount through the regression analysis. It came back and said that the pattern of what it found numerically was measured

at .04 percent.

Remember what I said -- I don't know if I said it, but for the verdict amount, that amount declined at a rate of 4.5 percent per year of increase in age.

So this picture here declines, this curve here declines at a rate of about 4.5 percent per year.

Q. You're referring to Slide 32?

A. Slide 32, correct. Whereas on Slide 33, when I fit the age coefficient, if I estimate the same regression, I get the red line. Which to your eye is as flat as it can possibly be. In fact, that number is 0.4 percent, is through this measure here, this confidence interval tells you that it's statistically no different than zero. Zero is in the middle of this. It says it could be potentially a small -- an extreme basis of minus .3 percent, as high as .4 percent, but it's centered on a number that is vanishingly close to zero.

So what it's telling me is, age has virtually no impact on the settlement values below this amount.

What that tells me through the model, is that these claims are settled without concern for the left-hand box of expected liability. They're settled for the purpose of avoidable costs. Which -- because otherwise you would see the impact of the average compensatory amount, and the fact that the impact of age would have on that.

Q. Did you also look at settlements greater than 200,000?

A. Yes, so that's the other part of the analysis. So I've done the same thing here for 5 percent of claims greater than $200,000 in the 2000s. Prior chart, Chart 33 actually had amounts that were equal to 200,000. This is for the amounts that are above $200,000.

And I've put the flat line on here which is just to show you that you can clearly, even to your eye, you can see that there's a distinctly upward pattern on this.

So clearly the idea -- it's obvious here that it must be some impact on this data coming through the impact of age on the settlement amounts, and the mechanism which that occurs is through the expected compensatory damage amounts. If I, in fact, ask the question of, would this be all through the verdict amounts?

Well, what I put on here is a yellow line which has this curve on -- has exactly the same slope, with the same decrease as the verdict, that is four and a half percent per year.

So this would be the settlement pattern you would expect to see if concerns for liability were the only concerns. So, as I said here, all liability, no cost.

If cost paid no consideration or cost was a trivial amount of the considerations for settling these cases, you would expect to see the pattern for these cases coming down at a rate that was similar to what we have from the verdict amounts, which we do not see.

Instead, what we see is as shown on this graph, is a curve -- and by the way, this black line is a curve. It is a combination of what would look like in this blue one there. But this is the result of a particular regression in forms called Longman (phonetic) area of regression, of the settlement data for the amounts above $200,000, controlling for the jurisdiction as well as the life status of the individual.

It gives us here as we see -- as reference to the coefficient. It shows that the data declines -- the settlement data, the pattern of the data reveals a decline in settlement average of slightly less than 1 percent per year, for each age of increase. And that we know from this confidence interval that we believe that is statistically different from zero random chance, doesn't play very much of a role.

That particular line comes about, which matches with this data, when I have -- within that data -- within the model that I created with all the settlement data that I have, about a 17 percent likelihood of success for the plaintiffs in this 5 percent of cases, and net avoidable costs between the plaintiffs and the defendants of about $430,000.

So it gives me the mixture, the econometrics gives me the mixture between how much of it is due to the expected liability amount, versus how much of it is attributable to the

avoided costs. And that's how I figured out the relationship between the change that took place.

And the test that we did was, we literally took this a step farther. We took the settlement amounts that we had from the 1990s, we essentially modeled the increase in the verdict amounts as what I showed you on the chart, increase in this liability percentage is an increase in the cost, run them through the model and predicted, and we get the pattern that looks -- you cannot distinguish the line that I get from that from the line I get from the regression. It lays dead on top.

Q. Thank you. Now, were your conclusions consistent with the litigation experience that we heard Mr. Magee and Mr. Turlik describe yesterday and last week?

A. Very much so.

Q. Okay. I would like to turn now to the second task that you were given, that's to estimate Garlock's asbestos liability.

Did you in fact estimate Garlock's liability for pending and future claims?

A. I did.

Q. Now, would you explain the assumptions you were given and undertaken in your estimation work?

A. So we've written them here on this slide. This is verbatim the assumptions that were given to me by Mr. Cassada and the others at Robinson, Bradshaw. They gave me -- under

the assumption they were giving me, they said estimate Garlock's asbestos liabilities as -- defined as Garlock's share of jury awards taken to final judgment for current Garlock mesothelioma claimants and individuals diagnosed with mesothelioma after the petition date, assuming -- and then we had three assumptions here on Slide 38.

The first one was to assume that all individuals who allege direct or indirect contact with Garlock's asbestos-containing products proceed to trial and final judgment.

That is, act as if you are handicapping each one of these cases as if they went to trial in a manner that would be similar to what the lawyers would do in estimating the risk of taking the case to trial.

In addition, he asked me to assume that the courts do not exclude the plaintiffs' or defendants' causation evidence under the Federal Rules of Evidence associated with -- generally called *Daubert*, or other similar rules of evidence governing the admissibility of expert testimony.

So if the defendants in many of these cases challenged the plaintiff's evidence on these cases. And so we've assumed for purposes of this analysis that those rules are not excluded. Because in fact the cases that go to trial where the plaintiffs win are in fact cases where this didn't occur.

And finally the courts and juries have access to all the

information that the individuals or their counsels have or can reasonably obtain regarding the individual's asbestos exposure.

So this isn't saying they know everything there is to know about their exposure, but all the evidence that there is about what their exposure is. What is known or reasonably known by all the parties, both from the defense side as well as the plaintiffs, are under consideration by the parties who are adjudicating the liability.

Q. Okay. So how would you describe the first two assumptions? Would those be assumptions against interest?

A. Well, I mean, I think that, you know, the cases which proceed to trial, as far as I'm aware, all the cases that proceed to trial -- in fact when I asked the attorneys who defended the cases for Garlock, are they ever aware of a case Garlock went to trial in which the plaintiff did not allege exposure, either direct or indirect contact? They kind of looked at me funny. What do you mean, of course they had to. That's the basis for the trial. They have to be saying that they were exposed to the product. These are product liability trials in which Garlock's exposure was -- exposure to Garlock's products was relevant.

The second one -- well certainly I don't think -- it certainly would be against interest from the standpoint of Garlock and the debtor here. If that rule was to be applied

and applied to all these cases then the liability would be zero, so.

Q. And we've heard criticism lobbed -- lobbied -- or lobbed from our adversaries that assumption three is somehow assuming the perfect world?

A. No, it's not a perfect world. Essentially here, in the way -- particularly in the way we're going to implement it. It's what do individuals actually know, or the counsels actually know about these cases. And particular, it's derived from the data that is provided as discovery in this case about what individuals know about -- typically know about the products in which they were exposed, and the names of those companies or the brands.

Q. Okay. Did you reach an opinion regarding Garlock's liability for the pending and future claims?

A. I did.

Q. What is it?

A. In total, I reached the opinion that the liability -- legal liability of Garlock's as defined above, was -- for pending claims is less than $25 million.

That the future claims valued at two and a half percent inflation rate from now until the last claim, would be less than $160,000. That the total amount of those taken together is less than $185 million. And discounting at a 3 percent real rate, which gives you a discount rate of 5.57 percent,

given the two and a half percent inflation rate, which would be 3 percentage -- 3 percent above that when compounded, gives you 125 -- less than $125 million.

And I believe that in fact the actual amount is significantly less than $125 million, though we can't precisely estimate how much.

Q. So why do you render your estimation opinion in terms of less than a number?

A. Well, as I just said, it's because I believe, based on the way we did the calculation here, based on the trial amounts and trial results we have, that the actual liability likelihood is less than what you would get by applying the trial amounts, and the trial likelihood outcomes to the results as you saw from the analysis I did of the settlement data which was not used as the basis of the estimates in the original case.

Q. Okay. And would you explain how you came to choose the 2.5 percent inflation and 5.575 discount rate?

A. These are amounts -- these issues having to do with what the inflation rate and what the discount rate is, as though I have an understanding of these things as an economist and have, you know, been -- familiarity with the kinds of economics that underlie them. That's not my particular field of study, though I do understand the relationship between them and what it needs to be.

For my purposes, giving the benchmarks I used essentially what CBO used for its long-term estimates of inflation and discounting.

Q. Are those rates that have been commonly used in estimation before?

A. They are. They are. And the various estimates we do, we have individuals have asked us and gives us different interest rates to use in different contexts. For example, in some business context to transactions context, a weighted average cost of capital is something that's asked to use. A particular situation associated with trusts might have a different set of numbers, a different set of inflation rate they use based on return of assets they would have. It depends somewhat on the purpose of what the numbers are being used for, which ones you would use in this context here.

So these particular are liability estimates. They're not estimates associated with expenditures.

So as an expenditure estimate, you would expect that an expenditure estimate you probably would have probably a higher discount rate that's more something akin to what the capital costs would be to the party who is doing the expenses.

This is an amount that's a liability estimate. It's not an expenditure estimate. And the more appropriate amount is more like the -- relatively the long run view of the relative value taking into account expected growth and so on, which

would be somewhere in the neighborhood of about a 3 percent real rate.

Q. Before we discuss the bases for your opinions on estimating the liability, I would like you to focus for a moment on the estimation work that you did for EnPro's financial statements prior to the bankruptcy case.

And we've talked some already about the relationship between settlements and liability.

Can you explain the difference between that work, the financial statement work and the estimate you prepared for Garlock in this case?

A. Yes, I mean, I put this here, I've done a little bit of adjustment to the basic model that we described on this Slide 40 here. This is referred -- parts of this is described -- well, this part of it is not described in my report, so it's really talking more about the model in general. So I don't think reference to the bottom actually applies in this context.

So you think about this as being two distinctly different parts of the model that we laid out here, relating settlement amounts to expected liability.

In particular, when we were doing financial reporting, we are concerned about Garlock's settlements, and in some context in other financial reportings, not just their settlements, but also the explicit defense costs.

But in the case of what we did here, we're interested in these settlements plus the -- and in some context for financial reporting, you would be concerned about how it runs through the insurance and the recoveries for the insurance which we didn't do in this context.

So we're estimated -- here we're interested in this part, which includes the amounts that Garlock would pay, not only to cover its liability, but the amounts that it would pay to avoid having to pay larger amounts for -- associated with its costs.

So based on the settlement strategy that Garlock pursued, it defines, given an expected liability which my understanding from the attorneys here at Robinson, Bradshaw was the allowed amount claims under the Bankruptcy Code which is the liability.

This amount here, which is the settlement amount includes and is impacted by the defendant's -- plaintiff's avoidable costs and the net impact of those on the settlement amounts themselves.

So we were focused over here. This is the data we have. Whereas in this case we've been focused on this amount here. These are two distinctly different amounts. They have a relationship to each other that comes through the relationship between costs, which in this particular case is one such the settlements -- given the pattern of the way the costs work

here, the settlements are multiples of what the actual amount is from the liability standpoint as we've measured it.

Q. Okay. So the bottom line is, that in doing financial reporting work and the estimation you've done in this case, you are estimating two different things?

A. Two very -- well, two distinctly different but related common things.

Q. Now let's turn to your estimation work in this case.

Would you describe what you are measuring in this case? I believe you just did that.

A. Well, we're focused on this amount. So what we've done is, we've proceeded through the data that we've accumulated in this case, as well as other data that we have, to estimate each of these components to come up with the estimated liability.

Q. So we're on Slide 41 now, and does this describe the components of your estimation model?

A. It does. The schematic now, we brought out the parts that have to do with the schematic of the model, just the parts -- focus on the compensatory award and the plaintiff's likelihood of success. So I'll address each of those in turn.

Particularly, the compensatory awards are actually made up of the economic damages in compensatory awards, which are a combination of -- excuse me, the compensatory award which are made up of the economic damages, the noneconomic damages,

minus the co-defendant's shares, minus trust shares and offsets. So we have these pieces that we have to address.

In addressing that, we need to know what the total -- what the economic damages are. How we get a handle on what the noneconomic damages are, which are the part of this which is perhaps the most nebulous. The number of parties sharing the liability.

Then within that, we need to account for the way in which the state laws in various jurisdictions would apportion that liability amongst responsible parties. Particularly what matters in this context here is the way they would treat trust shares as offsets coming out of trusts as distinguished from tort co-defendants. Those get treated in different ways, depending on what jurisdiction you would be in. We take account of that.

Q. Now, go ahead -- I'm sorry.

A. I was going to say, I was just going to run down the list here, which is, we have the issue of the other party's offsets. We're going to talk about, as well, estimate how we get a handle on what the liability likelihood is. The judge has seen some estimates in Mr. Magee's slides already about the relative liability likelihood as we saw from the trial outcomes. We will use that history, as well as test it with the settlement history that we just talked about already, and then we're going to identify the pending and future claims,

and how we do that so we can assign valuation of those.

So it's a model that's going to build from the ground up. It's going to estimate the components of these on -- essentially, what this -- this is similar to what we would call a microsimulation model as I described -- what we described before. We're going to do the valuation on the individual components for the purpose of being able to know how to appropriately weight the averages that we would get and aggregate up to the total. That's how we're going to get the most reliable estimate of the total amount.

Q. Now we spent several years undertaking discovery and gathering information in this case. We heard from Dr. Gallardo-Garcia this morning about how that data was extracted and used in conjunction with the Garlock database to build the analytical database.

Did you use the data that was collected in this case, the information in discovery, has that been used in rendering your estimation?

A. Very much. It's the main source of what we used for this data. In addition, there are some external data sources that we rely on as well, that we can talk about in more detail.

Q. Okay. So let's look at the components of the model.

First, can you describe how you estimated potential compensatory damages?

A. All right. So this is on Slide 42. It's covered then in

my report on pages 67 to 75.

So what we're starting with on each one of these cases is, going to start with the potential compensatory damages.

All right, now, what we have for that -- I think we'll run through the details of that in a minute. But in results we found that the total awards typically ran from two and a half to -- in the low value states, and I'll tell you -- by that I mean, states -- we've looked at and examined states. We found that there were distinctly different patterns of the willingness in various jurisdictions for juries to award large noneconomic damage awards. They're generally done in terms of multiples of what would be the economic damages.

So we found it useful to divide the states up into three categories based on the potential for large noneconomic damages. So we lowered them. We refer to them as low-value, mid-value and high-value states. High-value states being things like California and New York. Low-value states being a number of the states throughout the union as well.

The actual value amounts as you saw from the diagram that I showed you with the scatter plot of all the compensatory amounts, covers a much wider range than what I have here. The averages between the categories of the low-value and high-value states, range from an average in the low-value states of two and a half million, to an average in the high-value states of four and a half million dollars. These

amounts all vary considerably by the age of the claimants as we saw.

I also have data on that that comes out of -- from some verdict amounts. But the way I built to those numbers was, I have a model of economic damages that was created by an economist on my staff, Dr. Jeffrey Brown, who essentially built an economic -- a computer model that does -- implements an economic model that is conventionally used in wrongful death cases.

So it -- essentially there's lots of expert opinions by economists in the area of wrongful death cases, and there's a standard methodology that is employed. They have differences in various states of what things they can take into account, depending on what various states allow for medical -- for compensatory damages and economic damages.

But primarily they include lost wages, medical and funeral costs, benefits, value of hospital services, lost social security. So it's literally the economic parts associated with the death of an individual prior to when they would have otherwise have died.

So it's a combination of both knowing about them, their history. In this case as represented by what we know about their occupation. Because we have information on that and their age. Which then translates through the standard estimates of these things, plus what their expected age would

be, given the age they are about how much they would lose. That's one of the reasons why age plays such an important role in the sizing of these awards. Because it is fundamentally derived from the economic damages associated with this.

Typically, in these datasets, a claimant who is 65 years old, has an economic damage of approximately $850,000. A 75-year old typically has damages that are in the mid or the $530,000. Again, there's a fair amount of variation in those amounts, individually, depending on the occupations and the states. But the -- those amounts are typical within this range.

And then finally we have the noneconomic damages. And we've estimated that using the publicly available verdict data. We've calculated what the economic damages are. In addition, some of the verdict amounts actually give you the jury's estimate of what the economic damages amount, but not typically. Generally what you're getting is just the total amount of compensatory award. But knowing what the economic damages amounts were for -- from Dr. Brown's model, I can calculate what the typical economic damages are across the various states, based on whether it's one of the high, medium, or low states, or actually what the life status of the individual is at the time of the verdict. As we heard in the testimony in this case already, the verdict amounts will differ, and have potential differences based on whether or not

the plaintiff is alive in the trial, versus whether they aren't. And that affected these calculations.

Q. Turning to Slide 43, can you tell us what this graph shows? It looks familiar to a previous slide.

A. Yes, it is. But this is just a component of the previous slide. So this is essentially the part of the previous slide that is represented by the claimants who actually live in the states or file their claims in states -- we don't know actually where they live -- but file their claims in the states which had high value -- potential of the highest noneconomic damages.

You can see where I've drawn a line on this which is actually the regression line that shows you the general trend that you get by fitting that line with the regression model which estimates the impact of age. I think that line slopes downward at about a rate of four and a half percent per year of increased age.

Q. What are those little specks?

A. Oh, each one of those specks is one of -- is the results from the calculations of the model on each one of the pending claimants.

So these are the way we come out with the total model is, we've done the valuation with the model, the economic damage model, and then based on the state they are applied the noneconomic damage multiples to get to these points. So it's

done and that's what those are.
Q. Okay. So this curve is what you call the highest-value states?
A. Those are the highest-value states.
Q. Then we have a yellow curve on Slide 44.
A. That's the same thing for the medium-value states. And if you do it -- click it one more time, you're going to get the lowest-value state.
As you can tell, there's -- actually the most points are in the highest-value states, which is not too surprising. The analysis that we show is that when given the option, plaintiffs will file in the venue which gives them more likelihood of the largest potential outcome.
Q. Now you described the regression analysis issue you undertook to determine the values of verdict?
A. Right.
Q. Now one of the experts retained by the committee in this case, Dr. Cleveland, criticized your regression. Did you consider his criticism?
A. I did. I did. I think his criticisms were misplaced. He didn't actually have access to -- for some reason the attorneys didn't give him background material. He was unaware -- I attended his deposition -- he was unaware of it. Even with that, he interpreted what we were doing with this data, with this regression incorrectly.

The point is, is that we know that there's selection that goes on between the states. That there is -- the cases that get tried, as I indicated over here on the chart, when I was talking about here, the cases that are tried are distinctly different from the cases that aren't.

I could do exactly the same chart, relative to the evaluation of the two parties about what the total compensatory award share would be. Again, when there's commonality on those things, you'd expect to see them along this line. But when there are differences, you would expect to see them over here. So there's -- essentially these are unusual highly selected cases, in some respect. One of the ways --

Q. I hate to interrupt you. It might help you if you explain that criticism as lobbied first --

A. I'm sorry. That's what I was going to do.

Q. I'm sorry.

A. Essentially, just explaining the problem a little bit in the first place, which is the criticism was -- well, the verdict amounts that we see, when you look at them, they tend to be from claimants who are younger than the average claimant is. They tend to come from states which have higher value jurisdictions, the other ones. And they tend more likely to be alive at the time of trial, than the pool of claimants who generally file claims.

So if I want to use that data to estimate the potential value of the claims -- of the potential verdict amounts for the plaintiff in general, I have to account for those differences, otherwise I'm applying an average which is the wrong average to this group. I can't just take the average of the verdict and apply it to these claims.

That would be like taking the newspaper in a place like Los Angeles and looking at the ads for Beverly Hills and the ads for South LA, which is a poor area. And seeing that the ads were 50/50 in the newspaper for the high value and the low value, taking the average of those and applying it to all the houses when you know that only 5 percent of the houses in Beverly Hills, and 95 percent of the houses are in the other area. You have to control for the differences in the mix of them to do it right.

So what I did was made a regression analysis which related the value of the claims to the age of the claimant -- the value of the verdicts, the age of the claimant, the life status of the claimant, and the jurisdictions in which they are in.

That is -- gave me a -- the test of that particular regression gave me a reliable relationship between those variables, which I knew were different in the -- between the claiming pool and between the verdict pool. Which then gave me a basis to properly calculate these average particular

verdict amounts for each of the jurisdictions. Because now I have the impact that each has on the variable, and I can apply it so it will properly weight them. Just like, you know, when I take the newspaper ads for the house prices and if I go and take the ads and weight the ones from the South Central LA by 95 percent, and the ones from Beverly Hill by 5 percent, now I have an average that I apply to the average, typically, which gives me the overall proper average.

That's why when I said that the average is here, for example of claimants -- verdict amounts prior were typically between two and a half and four and a half million dollars. If I just simply take the raw average of the verdicts, I would get the wrong average amount. It comes out more like 6 million, $7 million. But that's because I am more typically drawing from claimants in this area of this, rather than counting for the weight that each portion has of the total, by the age. Because, in fact, most of the claimants come from this part of the graph, not up in here, which is where the verdicts tend to be.

Q. You described earlier in your testimony an article entitled, "The Selection of Disputes for Litigation" by Priest and Klein in 1984. In fact, you had a quote from that. Does that discuss the concept that you're talking here about the selectivity of disputes that are for trial?

A. Yes, that's why I put that quote in there, bring that

point home.

Q. Okay. Now, in rendering your estimate, after you determine the potential compensatory award, did you account for the differences in state law apportionment rules?

A. I did. I did.

Q. Describe what you did there.

A. Okay. First I want to draw the distinction. The states that I have here, and the partition of the states I have here, are not what I was just describing before. That partition is done in a different way with a different analysis. That had to do with potential for the size of the awards, which is not related to whether or not the states were joint and several or effective. So this is a different thing. There's three, so I just wanted to make sure there was no confusion relating to that here.

But on Slide 46 we have a picture of a map which is color coded. We have three different states which are green, which we have labeled as hybrid. We have some light blue states which are joint and several. And then the dark blue which represents the vast majority of the map says, effectively, several.

Well, effectively several is relevant here, because many of the states have essentially hybrid in a different way than what New York and California are, and officially Nebraska, but there's almost no claims there so it doesn't really make a

difference.

They are hybrid in a different way, which is, essentially, they have a threshold. Many of the states have a threshold, which is if the jury determines that -- I think this was already mentioned in the court. If the jury has a threshold that a particular company is more than 50 percent liable, is generally where the threshold is, then they can be joint and severally liable for the full amount of the verdict amount -- verdict award. However, if they are below that amount, they are only liable for their several share of the total.

Since that threshold is 50 percent, and our analysis shows that the number of potential liable parties is somewhere in the neighborhood as I will explain of about 36, and given that Garlock is a low-dose defendant, it's virtually impossible to imagine a situation where in any kind of a fair proceeding, Garlock would wind up with a 50 percent liability determination that would put those states in joint and several.

So for purposes of my analysis, I've treated them as effectively several.

So this is the -- shows the distinction between them, and we've taken account of that and how we've partitioned and treated the amounts of offsets and trusts in our analysis.

Q. Now turning to Slide 47. Would you describe the

alternative ways that you considered for measuring the numbers of co-defendants and trusts with whom Garlock might share liability?

A. Yes, I will. So when we consider what makes a basis for liability, there has, as been described in the courtroom before already, a number of different liability theories which can lead to a liability for the defendant.

Clearly, there is the direct exposure to the product as being the source of the exposure. Indirect exposure related to, generally we called take-home, that is through the clothes of a co-worker who came home with the asbestos dust on her clothes, and generally represented as being somebody who, you know, washed the clothes and got the -- or cleaned the clothes of somebody and got the exposure in that manner.

Bystander exposure. That is somebody who worked in proximity of somebody who was doing work with the product but didn't actually do it.

But there is also the possibility of lawsuits based on the design of the product was designed to have asbestos with it, and so that creates liability. That you distributed products that had asbestos in them, we saw the example of Pacor was a distribution company and a number of the companies which are referred to here distributed products. Companies get sued because the asbestos is on their premises, big oil refinery companies, power plant refineries often get

sued by contractors who work on those sites if they come down with disease, has been exposed to the product, it's not their product but it's on their site. And of course there is also the issue of conspiracy as been referenced here.

For the purposes of my analysis, I have limited it to just the first three. So we're just going to use this as an exposure basis. So, I mean, I'm not aware of Garlock actually being sued on any of the other four criteria, but its co-defendants certainly have. So for doing my analysis, I'm going to treat all of the defendants -- the co-defendants I do analysis on the same basis, that is, we're going to limit it to exposure basis.

Several ways you could think about trying to get a handle on the number of liable parties here that we get. The first is to use a term that was given by Patton in his expert report in this matter. Mr. Patton referred to a term called "exposure in fact". In his context he was trying to say that simply with reference to a site in a trust, does not represent exposure -- allegation of exposure in fact. We've had -- heard lots of debate over that topic.

But if we think about what "exposure in fact" means, there are literally hundreds of asbestos products each of these individuals are exposed to in their lives.

Electricians get it in a number of different ways, packings in various different kinds of electrical devices,

wire coating.

In fact, Mr. Henshaw provided me a list for categories of exposures that each individual worked in several areas typically would have.

As we've seen from the list that was put on the board yesterday, there's literally hundreds of different products -- our database showed thousands of different products that were in fact asbestos products.

There are in this litigation, thousands of companies that are sued, most of them under the exposure basis, but other on other ways.

So one of the ways you could do that, is to simply assume that all of the parties who could be sued because of exposure in fact, would be shares in the liability. And under the plaintiff's theories that we're going to adopt about contributions to exposure, those would be appropriate in many ways. But we don't have the information to do that. I don't have a reliable basis for estimating exposure in fact for each one of the individuals. So I rejected that as being the basis, but I do think it gives context to what we've done.

A second consideration would be just look at the companies that were named by the plaintiff, either in their tort claims, or in their trust claims. Typically the plaintiffs here have named 52 different co-defendants on these cases.

We know that they don't collect from all of them by any means. And they, in the course of their litigation, they target down to a small number of those who they pursue. But they have identified in their Complaint 52 potential parties. But we'll treat that as being tort parties. We treat that as being just that, potential parties for which they have not yet worked up evidence. Though they have some, presumably some legitimate basis to sue them.

That may or may not be 100 percent correct. There are after all venues in the United States which encourage filings because the courthouse in the county makes money off of the filings, and encourage filings for the purpose of raising money for that purpose.

Madison County makes approximately $4 million a year off of filings and answer fees by defendants, where the much bigger county of St. Louis right next door makes about a million dollars off of the same kinds of fees.

So the complaints that are filed in Madison County have -- typically have hundreds of them, and that affects that average. So I'm not going to use that.

But if I take account of that, as well as the trust, the information we know about trust fund, that would give you almost somewhere 75 potential parties, as well. Less than the hundreds that we expect exposures for, but not really a basis -- namings may not be a basis for which we're willing to

assert liability share.

The other extreme, the plaintiff themselves for their own reasons, target one or two co-defendants in the litigation. They name many. They collect from as the data -- collect from probably anywhere will range from, you know, somewhere around four up to 25 different of those defendants, depending on the quality of their case and the nature of the case. But if they proceed to trial, they typically only proceed to trial against one or two, and the settlement data, the recovery data that we've seen, tends to show that they tend to collect as well, high-value liability-like settlements from one or two, and nuisance settlements from others. But that's the result of the plaintiff strategically targeting the co-defendants because it makes their case simple, it makes their case easy.

Imagine the case that we saw presented here about the liability and the exposure that we have for gaskets here. It's applied against Garlock, and it helps not to apply that against the insulation companies at the same time, because it focuses the attention, and that's the claimed strategy.

So I rejected each one of those and instead gone with a basis for estimating the liability shares, based on exposures that are identifiable by the plaintiff. We've used the record that is created here through the interrogatories, the depositions, and trust claims from the sample cases. Here we have several hundred, nearly 1,000 claims -- over 1,000 claims

that we have actually gotten products that are estimates based on, and we've gone through those depositions, through the process that Dr. Garcia -- Gallardo-Garcia mentioned discussed and testified to earlier today.

And based on the product sample that we have, we come up with an estimate that there's, in addition to Garlock, 13 other -- typically 13 other products, tort defendants that the individual plaintiff can both identify, both the asbestos-containing product, as well as the manufacturer, at least knowing the brand of it, so that we can tie it to the company -- so it's tied to the company.

We take 22 trusts, we also estimate there are 22 trusts for which the plaintiff asserts exposure against in the same manner that it asserts exposure in this case against Garlock so we treat them as being comparable, and hence come up with an estimate of approximately 36 parties who share in the liability calculation.

Q. Yes. Now let's pause for a minute and sort of take stock of where we are. You're talking about your liability estimate. You started with the potential for compensatory award?

A. Correct.

Q. And now we're focusing on the parties, who under state law, would potentially share in liability, or in the apportionment of that award?

A. Correct.
Q. And you determined that there would be on average --
A. Typically.
Q. -- typically 14 tort defendants including Garlock?
A. Correct.
Q. And 22 trusts?
A. Right.
Q. Would you explain for the Court the source of your information about the numbers of tort defendants and trusts?
A. Well, it comes through the depositions and the interrogatories -- for the tort defendants comes through the depositions and the interrogatories provided both from claim files we had from Garlock as Dr. Gallardo-Garcia referred, as well as plaintiff's interrogatories and depositions that were provided by the plaintiffs in this case. Particularly the group was referred to as product sampling.

So there are ones that essentially appeared to be complete record of -- if anything, they tend to be the cases which I think have better cases against Garlock because they were, historically at least the ones where the cases were worked up by Garlock against the plaintiffs, so I would think they would be the ones that would be most strongly positioned against Garlock.

Most cases when you have cases that are dismissed, as you saw from the samples that Dr. Gallardo-Garcia put up there

before, we got a much lower yield we get claim files on dismissed cases than we did on higher-value cases for exactly that reason. You tend, in many cases, what you're basically paying for on low-value cases and what you don't get in dismissed cases is much more filed.

Sometimes the cases are dismissed later in the process so you do get the file, but many of the cases is simply dismissed early in the process, tend to get less of that in low-valve claims.

For the trust claims data, we have a combination of the information that we got from the DCPF Trust, mostly this information comes from the PIQ, the plaintiff information questionnaire, where they disclosed about their trust filings and the like.

Q. And I believe the Court has already seen in the designated plaintiff's claims, that the claimant's filings recovered from a lot of trusts.

A. Right. I think this is a conservative estimate, based on the analysis that we talked about before. We did not use the kind of site-based analysis that we've done there. I think Dr. Gallardo-Garcia described that as being -- it would have been much too onerous a task to do it, given different ways in which that information -- site information is entered into the data.

The data claiming exercise of that would have been truly

a mammoth exercise. But with the data that we did have from the PIQ and the claim we did there, we came up with a number of 22. And it didn't seem worth going through that expense and exercise to do that for potentially another three or four trusts exposures. So I think it's a fairly conservative number, given the information that we've seen.

Q. In addition to determining the number of other defendants that plaintiffs would typically identify exposure to, did you also determine the typical aggregate recoveries that claimants against Garlock would be expected to receive?

A. I did. I did. We received, through discovery in this case, several pieces of information from a supplemental sample of questionnaires. There were essentially a thousand randomly sampled PIQ claimants, which we got responses of approximately 850 gave us four pieces of information other than the identifying record, which was essentially the number and total dollars recovered from paying tort defendants. So we didn't have the individual values, we just had the total dollars and the total number. Then we also had the number and total dollars recovered from paying trusts.

So I went through in my report and did a test for the completeness of this data, and to see whether or not based on what I know and what the data would tell me about whether or not I would expect to see significantly more recoveries from that.

And after all, by definition, these are not completed cases from the standpoint of Garlock. It's in the bankruptcy. Some of them won't get anything from Garlock. A substantial number of them won't get anything from Garlock because they're older claims and historically we know, you know, somewhere in the neighborhood of half of them don't get paid from Garlock in recent years.

But the recoveries themselves appear to be essentially complete, but for the Garlock amounts. To the extent that they are owed one, we notice that through the data, typically they range from $400,000 up to $900,000. Typically from eight or nine defendants.

Though that's typical, in fact there's -- these amounts are quite skewed in the distribution. There's a small number of claimants who get a lot of money from this process. There's a small percentage of them get multimillion dollars out of this process. And then most of them get considerably less, the lower end of this or even below.

And included in this group are a series of claimants, as well, which I think is about almost 10 percent of them now as an emerging class of claimants who are only recovering from the trusts, so they have zero tort recoveries at all. These are the typical range for the ones who actually did recover from it.

But on average, the number comes out to be in the

neighborhood of about $560,000, once you take account of the various claimant characteristics and so on.

The trusts on the other hand were very different. Remember that the trusts only just started paying claimants in the period -- significant amount of money in the late 2007 period. So it's really late in the decade. Mr. Magee had a slide to show when the assets were in place. Those trusts took some time to come online, it's actually taken longer than -- certainly longer than Garlock was hoping, and certainly longer than we expected in our forecasts for those companies to go through the bankruptcies, get trusts set up and start paying claimants.

By the time they did get up and running, many of them had fairly extensive backlogs, particularly hundreds of thousands of nonmalignant claims that they had to run through before they could get to the current crop of mesothelioma claimants who essentially would represent the bulk of the claimants today.

So we get in the late 2000s is the first time we get to the period when we are actually starting to see claimants being able to recover, potentially on a contemporaneous basis with the trust.

There are still trusts which are not set up and running. And a lot of these claimants have filed their claims late, relative to where they did with their tort claims.

So for the current Garlock claimants, they still haven't filed all their claims. And they still have claims to be filed. So it's several years have passed since the petition date, so many of them have filed claims subsequent to that, but they are in the queue and waiting to get their turn to be paid in many cases.

So we estimate that at the present time they probably recovered about half of the money that they will eventually get, and it will typically be in the range of $600,000 from somewhere in the neighborhood of what we said, 20, 22 trusts. That number can be, you know, considerably lower, but also can go up to as high as 30 or 35 of them, depending on the particular claimant.

Q. Okay. Now, Dr. Bates, I'll hand you control over the slide show now. I want you to describe for the court how you applied the apportionment rules to your estimates with respect to the compensatory awards, and the numbers of responsible parties, and the recoveries that you estimate.

A. Well, I'm guessing I can probably go through this fairly quickly because I think Your Honor has saw this when Mr. Cassada did his opening statement. But at least explain what it was that we did here a little bit.

This is a chart which essentially shows how we did the apportionment, relative to the states which have the several share.

Essentially we came up with, as I describe, 36 tort defendants and trusts, the combination of 14 in one, 22 in the other; Garlock being one of them.

For our analysis we treated them all as being equivalent from the standpoint of liability purposes. My reasoning behind that is that Garlock is a low-dose defendant. Many of its co-defendants are either the low-dose defendants comparable to Garlock, or they are insulation and friable products defendants, which would mean that typically you would expect them to get much higher shares, depending on how the dispute plays out, as we saw in the courtroom in the science phase here.

But under the unusual circumstance cannot contemplate any situation which rationally would wind up with Garlock having a -- more than a 1/36th share of the total when there are 36 responsible liable parties on this.

So essentially this shows just a graph which shows you that Garlock is one slice of the 36. In the several share states, that's what they would get assigned.

Now, in the states as a whole, if the trust were able to fully cover their liability and all of the evidence is presented to the jury in a comparable fashion, you would expect all states essentially have the same outcome. So it's only in the fact that potentially the trust may not be covering their full share of their liability. Where that

comes into play and whether we have to consider whether it's several share versus not.

Now we don't actually know whether those companies can share in their liability. Mr. Swett has been in front of you and said they are paying, "pennies on the dollar". I question that. We have never been granted discovery, the ability to actually see that fact. It's not a fact that they're paying pennies on the dollar. It may be relative to their scheduled amounts. But in many cases I call into question from what I've seen about the size of the amount that's been put as the face value on these claims.

So as far as a liability estimate for those claims, we just simply don't know whether or not they are covering their share of liability or not.

But for purposes of this analysis, I've done it several different ways. One which attributes them an equal pro rata share, another which treats them as being essentially as if they were a limited amount and treats them as if they were simply offsets of the verdict amount.

The third one is to treat -- in fact, one of the benchmarks I've done is to treat everybody as if all the jurisdictions were joint and several, and all the dollars, whether from the tort or the trust were simply offsets against the verdict and Garlock was simply the final party.

So in the several states you would simply divide them up

in this way. In the joint and several state where you're taking in account just simply as dollar assets, trust payments would simply be represented as a subtraction off the total amount of award. So to the extent that this represents the total amount of the award at the end of conclusion of trial, assuming that the plaintiff won the award, we would essentially subtract the trust payments off, and the remaining 14 defendants would basically get one pro rata share of each of them. That's the way we treated those.

For the hybrid states, what makes these states different, particularly California, New York model in particular, is, the defendant is severally liable for the noneconomic damages, but joint and severally liable for the economic damages. So that's a reason again why it's important to have that partition. It didn't just help in our estimation, it also helped in terms of portioning the liability in this way.

So for the noneconomic damages, all the parties who are assigned, are assigned a share of the outcome, whether they're considered to be bankrupt or not, whether considered to be full or part of their share. The risk of basically not having a full covering of a share is borne by the plaintiff in that consequence, not the defendant.

However, for the economic damages, the -- essentially a calculation which is done, which essentially takes a portion of the amount that you collect from the trust. And that

portion is determined by the ratio of the economic to the noneconomic damages. So if the economic damages were half of the award, as this picture would say, then half of the recovery amount would be used as a dollar offset against the economic damages. And then the remaining portion of it would be divided up among 14 remaining tort defendants.

So that's the three calculations that show how the apportionment is between the various states.

Now, it's crucial within how we are doing this that we are dividing and treating all the parties, all the tort defendants and all the parties within the litigation symmetrically. We're treating them as being comparable in many respects.

So it's not -- we're not going to allow for, as we said, all the information is taken into account, all the parties are treated symmetrically with regard to liability calculations, so that it makes no sense for us to essentially allow all of the liability to get assigned to one party who is targeted, and none of it to the other parties who settled out, and then turn around and apply that same analysis to one of the other parties where they then get assigned all the liability and all the remaining parties are treated -- so all the parties have to be treated symmetrically with regard to the law equally under the law with regard to liability and the analysis that we've done.

Q. Okay. So you've described the process by which you have determined or estimated Garlock's share of a potential compensatory award. Now you also described the likelihood of success being a part of the equation?

A. Right.

Q. How did you -- or did you use Garlock's actual trial experience in determining -- or how did you estimate Garlock's -- plaintiff's likelihood of success against Garlock?

A. Right. We've seen -- so Garlock provided me with a record of its trial record. And we had essentially a history of about 83 cases, which you've seen a table of the analysis of each partition of that between plaintiff and defense verdicts through time.

Here essentially we're going to use that trial history as the basis for creating benchmarks of what the liability would be. Then we're going to test that, the validity of those results against the claimant data that we set.

As I referred to over here, you know, it's very clear as we said over here, that the tried cases are not expected to be typical of the settled cases. So when we're talking about applying the results more broadly in an exercise where we're trying to determine the liability of all the cases, relying simply on the trial data there, we need to test that against -- the veracity of that against the other data that we

have. Because there's so much more data in that case.

This is the chart on page -- Slide 54, this is the chart that Mr. Magee showed you. It shows you that -- what the difference in the trial outcome was. And what I've described in this outcome is what we call the information regime on the right-hand side. And it clearly indicates, as Mr. Turlik testified to, and as Mr. Magee testified to, the information that was presented, and how the information was presented in the context of litigation matters. And it matters significantly to the potential outcome of the case. Their own experience with regard to using -- having information about what a plaintiff's exposures are, and the form of that matters to the potential outcomes as we've seen through the testimony in this case.

So we have partitioned this into three different information regimes, that based on my understanding of the litigation environment, as well as my understanding of Garlock's history in interviewing with Mr. Magee and the defense attorneys who work with him, that in particular, in the period prior to 2000s, we had a period where Garlock had 36 trials for mesothelioma cases, and won all over 90 percent of them.

Again, a small growth, probably unrepresentative, but it is, shall show you that the plaintiffs willingly -- in environment where the plaintiffs willingly espouse exposures

to reorganize, companies even in the cases that they chose to take to trial, Garlock prevailed the vast majority of time.

Where they ran into problems in their verdicts was during the time period from the period of 2001 to 2005. And as I described in my report, this was the transition of the period the plaintiffs were increasing their demands on Garlock. And Garlock started to pay increasing amounts to some of the claimants, but at the higher end of the demands that they were getting were much, much higher than they experienced before and resisted.

The plaintiffs demonstrated that by particularly targeting them -- and as we now know, withholding or strategically presenting the evidence and positioning a case, as we saw here with regard to the importance of gasket exposure relative to the insulation exposure, and claiming that they are in many cases, perhaps equal in some ways. Which, you know, doesn't make any sense to me, but I saw how the evidence was presented on that. They lost more cases, and that's when they had the worst results in their history.

Going into the latter half of the decade, Garlock started spending considerably more on its trials. It started spending more on experts, developing testimony, investigating, and at the same time the trusts had began operation.

The plaintiffs now have an option of getting money from the trust by filing a claim. They don't want to be left out

to face the prospect of there being less money in the trust when they come about.

And particularly the tactics of having one attorney file the trust claims and another attorney handle the tort claim, essentially raises the prospect that the tort claims and the trust claims may proceed on tracks which are perhaps not always fully coordinated, which essentially provided some of the evidence that Garlock could use. They also started paying more claims, more money.

As I mentioned in my report, the fact is that they pushed the threshold down a little bit by paying a few more claims more money, and as a result, the claims that were left that the plaintiffs chose to take to trial on the margin, were not near as good of cases and Garlock would prevail on those cases.

So I have these three different information regimes. And in terms of the way I would think about the liability from the context of what we were estimating here, the period of the 1990s more fairly represents the period of the trial outcome of what Garlock would face with all the other parties being represented fairly equally in the courtroom with regard to the exposure evidence was there.

So I've removed from it, in my estimate, the parts of the information regime which the trust information was not provided -- was not represented in the same way and that's the

best estimate. And that's why I chose the period of the 1990s for my estimate.

Q. At the risk of being redundant, you tested that likelihood of success?

A. I did.

Q. What did you find about whether that was an accurate estimate of the likelihood of success that plaintiffs would have in trials?

A. Right. So I think actually we've got some information on the next slide which relates to that.

As I described in the earlier period here, when I looked at the cases, I used the settlement data in the way that I described, to come up with estimates of the liability likelihood, both within the -- for all of the cases, parsing them in the way I did here. Each one of the cases, based on the claimant characteristics and the settlement amounts and my estimates of what the avoidable costs are and the potential verdict amounts, allows me to back into a calculation for each one of them, what the liability likelihood would have been for that case, given the amounts that we estimate that they recovered, as well as the amounts we expected, for the most part at that point they had not recovered much in the way of trust claims.

So the settlement data actually took place in an environment where they actually didn't know all of that

information, so you have to account for that in what we did.

But in the face of that we found that the upper, nearly 5 percent, bullet says 4 percent because it literally was 96 percent, 4 percent of cases we had that the likelihood -- indicated likelihood of success on those cases in the 2000s amongst all the settled cases -- this is not going back to the period of the 1990s. This is using the actual settlements from the 2000s.

And implied likelihood, the calculated likelihood for those cases averaged within that group 17 percent. Now some of them are 100 percent. We have a series of them, they cover that entire range along that diagonal on what we have.

But what this particular analysis showed that in the picture that I had here, that 96 percent of the cases are all right there. Then we have a series of dots that run along this range. A few that we have verdicts are out over here for the most part. But we have all of those dots that are scattered around here. Some of them are up here at 100 percent, some of them are 50, some over there. But this is several hundred of them compared with thousands of them at this point right here. And that's what the data analysis showed us.

And when you did that test and you calculate an average across all of those to what you found by weighting the averages of 4 percent times 17 percent, plus 96 percent at

essentially zero, you got the typical -- for applying this to a typical claimant, the appropriate average amount would have been more closer to 1 percent across the entire population of potential claimants who would assert contact with Garlock product.

MR. CASSADA: Your Honor, we're closing in on putting all the components of this together in this second part of the opinion. I estimate we're about 15 minutes more on this --

THE COURT: Why don't we take a break.

MR. CASSADA: Okay.

THE COURT: Come back at 10 after 4:00.

(A brief recess was taken in the proceedings at 3:58 p.m. Court resumed at 4:12 p.m.)

BY MR. CASSADA:

Q. Thank you. Okay, Dr. Bates, you were describing how you tested your assumption of likelihood of success.

A. Yes. Yes.

Q. Had you completed that?

A. Yes. I believe we went through that.

Q. Okay. All right. So now that we've determined an estimate of the share of compensable award and the likelihood of success, what was the next variable that you estimated?

A. Well, the next thing to do is to apply the results that we have accumulated so far to the claims data, to come up with

our estimates for this, and how they apply to both pending claims and future incidence. So we did this to the two different populations in data.

So we have for the pending claims we have the data. We use the data that we obtained from contact with Garlock's asbestos products by identifying the potential liability candidates. And those were the claims that remained after the PIQ process, for which Dr. Gallardo-Garcia talked about.

So we essentially divided the pending claim data into two groups, those which could establish and asserted contact with Garlock's products. Because after all, the claims that go to trial are the ones for individuals who assert contact with Garlock's product. So that's the minimum requirement to basically make it to the point of a trial and those that don't.

And within that group, the claimants, we applied, essentially, the categories of -- we did an analysis of the categories with regard to the groups of contact that Mr. Henshaw gave us with regard to how the claimants were divided.

As far as the valuation of the claims goes, that part of it didn't play any role in the valuation of the pending claims, it simply gave for us a determination of what fraction of the pending claim would meet that qualification.

And so we essentially take the -- each one of the pending

claims. We use the PIQ data to establish which ones had asserted, either direct contact with either Garlock packing -- excuse me, Garlock packing or gasket product, either directly, indirectly or through a bystander basis, and treated them all symmetrically with regard to our liability estimate.

We estimated the aggregate compensatory amount we expect each one of them could get. We estimated the recoveries for each one of them. Both from the -- potential from the trusts and from the tort recoveries from the other claimants. We used the -- essentially the data on the states and jurisdictions to partition the awards. We applied to each one of them the likelihood -- liability likelihood that we got, and essentially that gave us a valuation of the pending claims.

For the future claims, of course, we don't know which ones they are yet. So for that purpose we have to go through the more extensive exercise and use the epidemiological model we have for future claims. For that purpose now we did use the contact groups as defined by Mr. Henshaw, because within those contact groups the PIQ data reveals that different percentages of claimants assert contacts with Garlock's product.

We didn't try to do anything more sophisticated than that, other than identify them. There are differences within the contact groups but -- with regard to the likelihood of

having contact and the amount of contact they had. But for this purpose we've done a simpler analysis and just used the fact of contact as being the relevant characteristic of the data.

So we used the data on the PIQs to basically partition the future incidence of these, which is represented by the small picture of the future incidence curve over there which we typically use in these cases. And we partition them into the contact groups that Mr. Henshaw defined, it's on Slide 56.

On Slide 57 I actually will show you how we divided up those groups.

Q. Okay. Before we go to Slide 57, I want to pause for a moment. You said that the claims for which there's potential liability, are all of those claims, claimants who actually just established contact with a Garlock gasket?

A. Who asserted contact.

Q. Who asserted contact.

A. That was the plaintiff's representation of it.

Q. That was assumption one, was it not, of the assumptions we asked --

A. It was.

Q. And as you described that earlier as a claimant-friendly assumption?

A. I think it's at least a minimum requirement for taking the case to trial. I mean, most of the cases which Garlock

paid, in fact, all the claimants that I know of, and the policy I know of was that a claimant in order to get paid, had to assert contact with a Garlock product. That's essentially an insurance requirement. They have that as a minimum requirement, that it has to be someone who's asserted contact with the product. Same basis for the liability, and that's the basis for the -- now, most of those claimants as we know, didn't get paid at all. But we've accounted for that fact in the calculation of the liability likelihood that we used when we used -- recount for the settlement data.

For the trial cases it's only likely to be the higher-value cases. And for those, you know, we use the higher percentages with it. It would be a claimant-friendly assumption to use in this basis.

Q. Okay. Let's go to Slide 57. You were describing how the contact groups are represented in this?

A. Yes. This curve shows you the result of the -- model of the occupational incidence of mesothelioma. It shows that an aggregated peak, somewhere in the neighborhood of 2000, and by 2010 is on its way down. This is not the entire incidence of mesothelioma. This is the part that is attributable to the use of asbestos in occupational settings. We've divided that. The color coding shows you the amount of it which comes within each one of the contact groups.

And so as we can see from this curve, we expect to have

cases of individuals who will come out of each of those groups going well into the future, though we are in a period of where we are declining rather rapidly, and for a population that's aging. This comes out of a population, a fixed population of individuals where the incidence of disease has essentially ended in 19 -- excuse me. The exposure to asbestos has occurred in 1979. I've done some testing on this to take account of the fact that there's been some assertions in the testimony in this courtroom that there were exposures that could come from gaskets beyond that time period. And I've done some sensitivity of testing on that, based on the evidence that I've heard, and it does not have a material impact on my assumptions. I can quantify that if there's interest, but I don't think it has impact on the results.

Q. You describe the incidence model that you had constructed over time, I believe you described it as a further refinement of Nicholson's original incidence model?

A. Correct. Yeah. So this is actually an aggregation of thousands of populations of people that are aggregated together, which have different -- within each ones they have different levels of exposure to asbestos that are basically derived from estimates in what's called, I think, Dr. Welch referred to, "Job Exposure Matrix" in here. Which refers to the estimates of the relative exposure that each one of these occupational estimate groups have. And there's several

thousands of those.

We then used in constructing this model, the -- essentially what we adopted what amounts to the -- what's been called in here the regulatory model of the incidence of disease. So we have actually allowed for low-dose exposures to have a risk, instead of going all the way down to zero in a linear fashion, the same way that Dr. Welch and others have explained in the room here. So we have taken that assumption as being the basis for this model. It's the model that Dr. Nicholson used, the risk model that Dr. Nicholson used. And for our purposes we adopted the -- essentially the plaintiffs' view about the contribution of low-dose asbestos to the incidence of disease.

And in that basis we have actually expanded the populations far beyond what Nicholson used. Because his population did not include the bystanders and the indirect. We've included those in the way this model is estimated and in our estimate.

So we have adopted, essentially, the plaintiffs' view about the -- as described in here about the role that asbestos plays in disease and assume that every incremental exposure adds to the risk, according to formula, the 1986 formulas of the EPA that Dr. Nicholson developed.

Q. Now we're turning to Slide 58. Would you describe then how you estimated the number of persons who have contact by

contact group?

A. Yes. This is essentially the part -- a portion of the prior curve, but done in bars. And it shows the portion of the population, which based upon the PIQ of responses we assert would -- based on PIQ responses, would assert contact based on contact group with Garlock's product.

Now there's several assumptions behind this. The assumptions I think are claimant-friendly assumptions in that PIQ responses are population of people who actually sued Garlock. Which is not the entire incidence of the disease, not the entire occupational incidence of the disease.

In fact -- so, by using the PIQ responses to partition this, we've essentially assumed that the entire incidence of disease is an occupational incidence of disease is a candidate for our consideration for valuation. And we then take a fraction of that population based on the PIQ responses about what fraction of the people asserted contact.

Well, the denominator in that case, the number that we were using, was the number of individuals who sued Garlock in that contact group. That number is less than the number of people in the incidence of the disease. So when we apply that fraction to the future incidence of disease, we're adding extra people into that.

This estimate, the estimate we have here, is essentially independent of the claims -- the history of the claims that

Garlock has in terms of the number of people filed, which essentially just comes out of the incidence of disease, and the fraction of that incidence of disease that would assert contact, assuming that it's the same as in the PIQ response group. So there's no equivalent to what would be the concept of propensity to sue based on the history. It's built up from the ground up based on that data.

So each one of these bars shows you the fraction of the people -- the number of the people within each one of the contact groups that we are going to run through the valuation model, apply a likelihood of success, estimate of compensatory damage amount for them, and estimate the relative shares based on -- for this purpose, that's what this represents.

Q. Okay. So now I think you've described how you estimate --

THE COURT: But there's no percentage in there, says "percentage of incidence". There's no percentage on the chart, is it?

THE WITNESS: I'm sorry. This represents only a percentage of the incidence.

THE COURT: I gotcha.

THE WITNESS: Just to flip back for a moment so we can see. This chart peaks at around -- well, at 2010 it would be somewhere in the neighborhood of 1900, 20 -- 2000. So we go to the next chart. We have for that year -- well, use this

number. We have a number here that's just slightly over 1,000. So we're taking slightly more than 50 percent of that percentage of that population. Sorry for that confusion.

BY MR. CASSADA:

Q. Okay. So to recap you estimated -- or you described how you have estimated each variable in the model. And you've described the model. Can you now describe how the input of the variables in the model rendered your estimation results?

A. Right. So we applied the model that I've just talked about to each of the claimants in the pending claim group.

I've essentially created three benchmarks, as I've described in my deposition, to do an evaluation of that. I did a calculation associated with the pending claim groups where I treated all of the pending claims as if they were several share, that is, as if there was a full share recovered by all of the -- the trust had the full share of liability covered through for this model.

I did another calculation where I applied it in this way which was the combination of -- for the states that were joint and several, I did that calculation. For the states that are several I did the calculation I described. And for the hybrid model I did those. And I did one whereas I said, I treated them all as being joint and several calculation.

We know that from the settlement data -- the verdict data, we got an estimate here of approximately 8 percent. We

know from the testing of the settlement data that that number is really less than 8 percent, and likely much, much less than 8 percent.

Essentially we have here -- we call it -- we put this as the formula as if it was a number. In fact, what we did was, we did these for each of the individual claims, multiplied it by a likelihood percentage, added them up to get to essentially for each one of the pending claims. And when you do that, we come to the conclusion that the aggregate total is less than $25 million.

Q. And how about future claims?

A. Well, again, we did the same thing with this population. Only instead of applying it to the individual claims on the pending claims, we do it to the groups of claimants within the future claim group, and on the basis of that come to the conclusion that the total is less than $100 million. And likely to be given that the 8 percent is significantly much bigger given the large volume of claims that we have here, the 8 percent is likely much too big, the number is less than $100 million.

Q. Now you've described today the difference between -- what your estimation results are. You also described the difference between liability and settlements. And you also described the difference between an estimation of liability and an estimation for financial statement purposes?

A. Correct.
Q. Let me ask you to look at the next slide, and describe the information contained in this slide.
A. Well, this slide was prepared as a result of some questions that were asked me by Mr. Guy in my deposition, when he asked me at the end of it, had I done any analysis what I would get out of my financial reporting models that I used, if I extended them out to the end of the period of the -- for which the model ran. The same time period that we have here, of going out 2059 essentially. I used it only for mesothelioma claims. What would I have gotten if I run that model out?

So the differences between what we've done in financial reporting was that we -- one, we had other diseases included in the number of reported.

And two, we didn't account for the -- we didn't take a present value calculation. It's in the model that we had. But in terms of the numbers that are reported for the financial reporting purposes, they only reported the nominal amounts.

For counting reasons, some of the accounting firms don't want to use a discounted number. They prefer to have on the balance sheet a revealed total nominal value amount. So that's the choice that they did.

So what this chart has done is, I've put in perspective

the -- our calculation here of Garlock's asbestos liabilities, which in total is less than -- I'm sorry. Is less than $125 million. With what I would get using that same model, the financial reporting model in a couple of different circumstances.

As I described in my deposition, if I have this amount here, which was essentially what I would get if I had the low end of the financial reporting range I had, which was a number that ran somewhere in the neighborhood of 330- to $430 million.

This is the number I also get in my rebuttal report when I take Dr. Peterson, Dr. Rabinovitz's estimates and do the corrections for the data and estimation that they used, and then apply my estimates of what the impact of full trust transparency would be on their estimates.

That's essentially what we were trying to capture at the low end of financial reporting range, is the impact that the trust would have on the information that would affect the settlements.

And we didn't have the model and we didn't have the data to do it in the way we did here. So there we were essentially using the period of time from the earlier periods, to calibrate to the time period from the 1990s, at which we would then take a partial revision to that amount.

Just to get the idea of what we were talking about there,

is this is the amount that you would get down here if you would have applied in the range of 140 to $200 million. If you applied the experience of Garlock in the 1990s to the filing history that we see in the 2010 period going forward, and apply that to the pending claim. So essentially that gives us an estimate of what would be equivalent -- in doing the financial reporting, this is what we would calculate -- is what you would get if you had the experience of the plaintiffs fully avowing their exposures to asbestos products, in particular the insulation products and the friable products as they did in the 1990s.

And in that period, that's probably the situation which was the best for Garlock in terms of defending claims, and it's going to have the biggest impact. Because they're not going to be targeting Garlock. They're going to be targeting these. Or if they're targeting Garlock, they're doing it in the context of also targeting these insulation companies. And that's what you would expect to get when they are playing an active role in essentially describing the exposures to the insulation products and it's coming out of plaintiff's mouth in their deposition and they're answering interrogatories in the same way.

On the other end of our financial reporting range is a range up here that's in the range of somewhere around 610 to $670,000 -- $670 million net present value.

And this is the period you would get if you extrapolated the current period of time, through the mid-19 -- mid-2000s out through the end of time for the financial reporting of the incidence of disease. That is what we would get from the upper end of our financial reporting model.

It's also what you would get if you basically take Dr. Rabinovitz's model and Dr. Peterson's model and you get estimates within this range, if you simply adjust for us to get the same present value calculation and correct their data errors and exclude what I call some of the adjustments which Dr. Peterson makes and which I take exception to and think are erroneous.

Those and models then, between the three of us we would get within that range, again, a similar range of numbers all within the range of 610 to $670 million.

MR. INSELBUCH: I hate to interrupt, but this material is not in Dr. Bates' report, or in his rebuttal report. I'm glad to have it, but I would like to have the backup material that results in these assertions, what the computations are. Could I have that tonight?

MR. CASSADA: Sure. I think you already do. These come from the financial reporting that Dr. Bates did.

MR. INSELBUCH: Well, he says so. I'd just like to see the calculations.

THE COURT: Okay.

BY MR. CASSADA:
Q. Okay. Please proceed, Dr. Bates, or were you finished?
A. No. I was simply going to mention that within the context, these are the two amounts that I described in my deposition, and I described these ranges to them. This amount I'm providing is context for how we did the calculations for the upper end and the lower range, and then the perspective. This is the middle of the financial reporting range that we would get that we reported if you used the same model and pointed out -- pull it out to the future in the same way. So that would be a number that started from mid-400s to mid-$500 million in valuation.

So the financial -- so the financial reporting model is consistent with what we've done here, in terms of what it tells you. It's just we're focused again on different numbers than we were.
Q. Okay. Can I ask you a few questions about the financial reporting? Because the court has not seen your financial report.
A. Sure.
Q. Was it your opinion in 2004 or so when you were first engaged in late 2004, early 2005 in connection with the financial reporting work, was it your opinion that Garlock would -- a day would come where Garlock would likely get relief from the establishment of the trust, and that that

would have a downward impact on future expenditures?
A. Yeah. From Garlock's perspective, it's a relief. I expected that as I described this that the information that had been in the litigation, would again be in the litigation when it was a combination of when the trust would be paying, they would have access to the discovery on the trust, and the plaintiffs themselves would have a financial incentive to file the claims with the trust.

I don't think any of us anticipated at that point that it would introduce the provisions that basically said that you would not be able to get access to that information. It has something to do with why we wrote the paper that we did in the later part of the 2000s about having the tort vehicle too. Because when we started becoming aware of those provisions being put into the trust distribution procedures and the role that those would play.

THE COURT: Mr. Guy has something.

MR. GUY: Yes, Your Honor. I'm happy to hear this from Dr. Bates, but I'm assuming that this takes care of any objections there are to the financial reporting being used in the courtroom?

MR. CASSADA: No, not at all. This is an explanation of why it cannot be used for the purpose that we described earlier.

THE COURT: All right. Let's go. Go ahead.

BY MR. CASSADA:
Q. So then you rendered estimation opinions that took into account scenarios under which Garlock would get relief from the establishment of the trusts; is that correct?
A. Yes. That was the main purpose -- the main purpose of the ranges that we created, the -- one of the main sources of the ranges that we considered was trying to take account of the fact that we were moving into a future which is not going to look the same as the past. What we have is data from the past. We're trying to figure an appropriate way to account for that. We don't have all the data that we needed to do that, but we have the idea of what the impact.

So we created alternative scenarios, which in our judgment reflected what the impact might be, presented them as scenarios, because -- and we put some qualitative judgment on which would be more likely than others.

In particular, this area of the range, somewhere in this area here to down around here was in the area which we considered to be most likely.

And in the period where we were reporting more in the middle of the range that Garlock was disclosing -- EnPro was disclosing the middle of the range, they would have used numbers that were coming around in this range here.
Q. I see. So when you look at the range created by the top three of those different ranges, and moving from the bottom to

the top, that represents different degrees of transparency that Garlock might expect to get from the trust in the future?
A. Right. I think of them, as I said, information regimes. They have different ways in which the information is available, how much of it's available, and how it's being presented, and how that can affect the litigation. I think that's what I'm representing through these scenarios.
Q. I think this is probably obvious from the testimony you've given today, but can you explain the difference between the upper end of your range of Garlock asbestos liability, and lower end of the range, beginning with the -- the little -- what you call there, the low end of financial reporting range?
A. Well, the difference between here and here?
Q. The difference between there and the top of the blue bar at the bottom.
A. Oh, right here, the liability? Oh, the difference between this and this?
Q. Yes.
A. Well, the difference between that is the amount that Garlock would pay in settlements to avoid costs associated with the discovery and the litigation in the case. So that's their avoidable costs by settling.
Q. So if we're back looking at that model that you had where you had settlements in the midpoint of the range between the plaintiff and defendant's calculus, and the actual liability,

that would be the difference between the liability and a settlement that took into account the defense costs?
A. That's correct.
Q. Okay.
A. Well, in aggregate. It's the aggregate total difference between what we estimate being between what is amount -- that somewhere the liability amount is somewhere represented down here. And the difference between there and there is the amount that Garlock is essentially paying to avoid even larger costs as we saw, of litigating all the claims.
Q. Okay.
A. Obviously litigating all the claims is more expensive, so...
Q. Okay. Thank you. So now you've finished explaining your first and second opinion. We're going to turn to your last opinion.
THE COURT: Before you go to that, when he summarized, I thought he said that future liability was $160 million, which he added the $25 and then discounted to present value at $125 million. One of the previous slides, I think, said $100 million for the future liability.
THE WITNESS: That's $100 million net present value.
THE COURT: That's net present value. Okay.
THE WITNESS: And this was $25 million net present value.
THE COURT: Gotcha. Okay.

BY MR. CASSADA:
Q. So they are future in the sense that they would be payments in the future, but part of it represents the pending claims.
THE COURT: He had put the discounted figure in that --
THE WITNESS: I'm sorry, Your Honor. Yes. We discounted it before in this calculation.
THE COURT: I gotcha.
MR. CASSADA: Your Honor, any other questions about this?
THE COURT: No. No.
BY MR. CASSADA:
Q. Dr. Bates, in the third task that you were given, we asked you to reach an opinion regarding adequacy of Garlock's proposed funding of $270 million under its trust, specifically whether that would be sufficient to satisfy pending and future claim?
A. Yes.
Q. Have you reached an opinion with respect to that issue?
A. Yes, I have.
Q. What is your opinion?
A. I agree -- I reach the conclusion that Garlock's proposed funding of $270 million is sufficient to satisfy the pending and future claims under the debtors' plan of reorganization.

Q. Okay. So we're gonna have to spend a little bit of time explaining the plan to the Court, and explaining the bases of your conclusion.

So first -- can you describe, then, the conclusions you reached regarding a value of the claims under the plan?

A. Right. So, just to set it in context with what we did before. Essentially the plan of reorganization provides a procedure by which claims can be presented for payment and requires certain information about the claimants' exposures and their alternative exposures to be presented as part of the plan.

So with that back context, we expect to be able to understand what would be an appropriate amount to cover that as a settlement within the information regimes that we talked about before.

Because, in fact, they're essentially intermediate to part of those information regimes as I described. It's not the equivalent of fully espousing the exposures, but it's cheaper than having to go and get them through litigation discovery because it's an administrative procedure that they have to go through before they get to the litigation, so -- potential for litigation.

So the information has to be provided, and has to be provided in a way that is inexpensive for them, but it is no longer costing Garlock in the form of litigation expense to

get that, and hence it's a reduction in the avoidable costs to Garlock and lowering in what we would expect to be -- expected appropriate settlement amounts.

So essentially the estimate -- we're going to estimate the settlement value of the current and future mesothelioma claimants. We have in the plan that specifies what that amount is. We believe that value has a premium that Garlock claimants would receive under the plan of reorganization. It's an amount that is in excess, significantly in excess of its asbestos liabilities. The premium is attributable to the benefit Garlock received, so it's going to be less than what they would pay in the tort system under the estimates that we've got.

On the other hand, essentially it's above the liability and significantly above, and there's no reason to believe that if administered properly, the claimants wouldn't accept the settlements and be incentivized to settle with the trust. In particular the way its structures pay different claimants different amounts, particularly those who might have a potential liability for Garlock.

Q. So the plan addresses the transaction costs that Garlock had faced in the tort system to achieve the information regime where it would actually get the information?

A. Correct. It's a reduction in the transaction costs, and that translates, as we've seen -- a reduction in costs

translates into a reduction in appropriate settlement amounts -- expected settlement amounts.

Q. Can you describe with reference to your previous discussion about the relationship between the settlement and the different determinants? Can you describe how the plan works?

A. Sure. What we have here is, this is a picture of the chart that we showed before where we showed where the settlement ranges were that came out of -- these were for the cases for which are the 95 percent of cases for which Garlock has no perceivable trial risk associated with them.

Within those cases, as you recall, Garlock was avoiding costs on average of about $65,000 leading to settlements on average of about $37,000.

Under the plan of reorganization, those costs would be reduced. And we believe in terms of thinking about it in terms of the information regimes that are there, and understanding what they would apply in terms of the cost based on my analysis, it would be equivalent to basically reducing the costs -- avoidable costs to $20,000. So that's equivalent to about a $45,000 savings in cost through the discovery and litigation costs. Which I don't think is unreasonable at all in light of discovery -- the information requirements that need to be brought forward.

The impact of that should be a reduction in the

settlements which as we know, the appropriate settlements for that based on the modeling, that would be about $12,000 through the plan of reorganization instead of the amount which was $37,000 as during the period of the 2000s when they had to litigate to get that information, versus only 5- or $6,000 as prevailed in 1990s when plaintiffs actually espoused that information on their own.

Q. So what are your estimated mesothelioma payments under the plan of reorganization as such?

A. Well, the estimate of the payments under the plan of reorganization, we believe for pending claims is less than $60 million. In this case not significantly less, but less than $60 million. The future claims at two and a half percent inflation, would be approximately $260 million. So we've inflated the values here at an expected inflation as we did with the future claims, giving a total of $320 million.

So here we've actually added inflation to the amount, unlike some trusts which don't actually inflate the amount for trusts.

Then if we basically use the same present value calculation associated with this, it would be -- essentially we estimate that the total amount required to make the settlements, given the number of claims and the payments of the trust, would be less than $220 million, pretty close to that though.

Q. The -- there's been testimony in this court about the trust distribution procedures. Garlock's plan has claims resolution procedures which would be the equivalent. Could you describe the criteria -- the basic criteria under the CRP, and the resolution alternatives that are offered to claimants?
A. Right. Well, I mean, this slide describes them. So in this particular, we're going to -- there obviously has to be, like the other trusts, the 524(g) trusts, the bankruptcy trusts has done, requires medical evidence of pleural mesothelioma.

Again, we're going to require direct or indirect contact with the Garlock asbestos-containing products. Require contact with Garlock's products before January 1st, 1978. And then have, essentially, require that they be able to identify product.

The options here are two. There's an expedited review option and an individual review option.

Claimant having gone through the procedures and does not wish to accept the settlement under either outcome, can go to essentially a litigation outcome and try their claim in the tort system. But before they can emerge to go to that, they have to have provided the information required for by the trust.

Q. What is the purpose of the expedited review option and how does it work?

A. The expedited review option here is essentially an option that does not require -- requires less information to be provided than the full individual review option. It -- it's modeled in many respects after something that's like the Western MacArthur Trust which has a more -- a trust which actually takes account of claimant characteristics. So unlike some of the trusts which have a very simple scheduled amount, and that's it, then you can go to individual review. And the individual review option there is basically about, you know, what's your -- which lawyer did you sue with, what your age was and so own.

This doesn't account for that in any way. This is a more sophisticated approach but is modeled after Western MacArthur. In fact, in some respects, it might even be a little bit simpler, but it does have the recognition that within the contact groups that Mr. Henshaw recognized, there's a more likelihood of potential for risk, and more likelihood to be deserving in some of those contact groups in terms of the role that Garlock's gaskets play within the contact -- the asbestos exposure within each one of the contact groups.

The table over here shows you essentially, the maximum settlement amount that could be offered. Then there is essentially, an index that is described that is the -- essentially is calculated and is based on the diagnosis, age of the (indiscernible), age of the individual, their life

status, their spouse and other dependents, the duration and contact of exposure, and the state which they claim filed.

This is very much like you would do with the Western MacArthur Trust, without the contact groups because of the nature of their product that they had other requirements, particular things like claim filing state, spouse, dependents and life status are all aspects which came to be so the index was modeled after that trust.

Q. Okay. I'm going to break a rule and I'm going to go backwards but just for a moment.

When you were describing the claimant -- the criteria for settlements, you described the requirement that there be contact with Garlock's products before January 1 -- I'm back on Slide 67 now. January 1, 1978. Would you describe the basis for that criteria?

A. I think this is when the warnings went on to the Garlock's products, so it's a legal basis.

Q. Okay. Do you know whether Garlock paid settlements where there was first contact alleged after January 1, 1978?

A. I do not know that.

Q. Okay. Can you provide an example of expedited review settlement offer to a claimant with significant gasket contact?

A. Right. So this is -- essentially shows you how the index would work through and how the settlement amounts would work

for an individual with expedited review. He's a 64-year-Old claimant who is alive at the time of his filing. He has dependents. He worked as a Navy pipefitter for 15 years, and he's in the state of Illinois. The index would calculate and give a settlement offer to that person based on that information of approximately $94,000.

Q. Can you then -- describe the example of an expedited review settlement offer for a typical claim?

A. Well, a typical claimant would be less. They would tend to be older. They would be less likely to be in the first contact group, so their maximum amount would be less. So this would be someone that comes from the State of California where there's a significant number of claims come from. He does have dependents. He is alive. But he's in contact group two and he's older. So the settlement offer for this amount is about $21,000.

That's how the formula works. There's essentially a template, a calculator that can be used that you can plug these amounts into and actually get the amounts out.

Q. When you say there's a calculator that can be used, who could use that calculator?

A. Well, a claimant could use this. You have the trust, you could essentially on the web site put the calculator, such that an individual could plug in their characteristics and know the amount they could get; both under the individual

review and the expedited review. So that they could essentially figure out which is the better way they should file their claim, based on the claimant characteristics --

Q. Good.

A. -- as well as the other information. Because the individual review's going to require additional information requirements. In many cases that would actually reduce the settlement amount. The plan wants to encourage people to use the individual review so that the vast majority of them, they will get more money out of the expedited review. Which is actually not any different than the money in the 524(g) trust. You can submit for the higher demands, put higher administrative demands on the trust, you better have a higher quality claim to be -- to make it worthwhile.

So both parties save money through the expedited review process for the vast majority of claims.

Q. Let's turn to the individual review option. Would you describe the purpose of this option and how it worked?

A. Well, this is an option that basically is tailored to account for the fact that occasionally through the litigation there are individuals who assert that Garlock is either the sole or the primary source of their exposure. These are going to be unique individuals. And if that is the case, you would expect to see Garlock owing a fairly large amount of money on those cases, assuming that they actually meet those criteria.

As we've seen through some of the discussion through Mr. Turlik and Mr. Magee, a number of the cases that were presented gave the appearance of that. I think the term that Mr. Magee used was illusory, but in fact they turned out after the fact not to be the case. We're talking about the ones that would actually meet that criteria.

So this plan -- this again has an index -- several sets of indices. It uses the same information that's in the expedited review, but it also requires complete job and exposure history, and the identification of other sources of exposure, including settlements, claim trust, which the other did not. The other was a settlement.

So essentially, you don't have to provide the other information, other than what you do currently to Garlock in the settlement, which is assert the direct contact with Garlock product, within the timeframe, provided the necessary demographic occupation, and basic occupational information and you can get a settlement offer out of it. Whereas this one requires more of the complete job and exposure history.

Now, the potential is to get a lot more money. The maximum value for this category is two and a half million dollars. It takes a fairly young claimant here to get that, with strong economics, and other criteria.

But really what this amounts to is they don't have a lot of alternative exposures to point to. In which case that's

where you expect to see Garlock would be likely if it was a case such as that was taken to trial and win, Garlock would have to pay a fairly significant amount.

Q. So going back to your liability estimation model, this would be a case where the Garlock share of the total compensatory award would be high, based on the lack of other exposures?

A. That's correct. It would be one which you would expect to see a very limited number of other exposures to it.

Q. Can you describe an example of an individual review offer to a claimant with significant gasket contact?

A. Right. So this would be the idealized person who does a lot of work which is a gasket cutter, but they're not in the presence of industrial -- insulation products, for which there is, you know -- in this case is an individual of 64 has a life status, he's alive at the time of filing. Has dependents. He's a gasket cutter. Has direct contact. He's in the State of Illinois. Has no co-defendants, but it has basically filed a claim -- has a claim against Manville, because most of the individuals would have a claim against Manville, except for -- I don't think we've seen somebody who wouldn't qualify as a claim against Manville, but that's not to say it doesn't happen eventually. This individual here would get over $1 million.

Q. Okay. Can you describe an example of a -- I believe this

is supposed to be an individual review settlement offer for a typical claimant?

A. Well, this is what would happen if you basically -- if the person who was going to get 20 -- it's mislabeled on Slide 73.

So it's essentially what the individual review offer would be for the claimant who we showed before would have gotten $21,000 as a typical claimant.

Q. I've gone back to Slide 70, and this is the same claimant?

A. Right. This is the same claimant.

Q. So he's applied here under Slide 70, he's applied for expedited review.

A. Yeah. And here, if he applied for individual review instead, you would expect that he would have, you know, typically if he had to provide his exposure information, he would have 32 -- excuse me, 13 co-defendants and 22 trust claims as we described in the analysis.

This person in this case would only get an offer of $3,500. Essentially he would definitely be an individual who would go for the expedited review as he should.

Q. Okay. So just to be clear, we're looking at Slide 73 now and it should -- it's entitled, "Example Expedited Review Settlement Offer For Typical Claimant". It should be Individual Review?

A. Correct.
Q. So how did you estimate payments under the proposed plan?
A. Well, we used the information provided by the claimants in the PIQ. Again, in that process. And so we valued them under the terms of the plan, so that -- and we created the indices for these things. We put in some estimates of things like dependents, and likelihood of being alive from the data that we had as well. We have the other information. And we calculated for each one of them what would be the result of the expedited review, the individual review, and what they would expect they could get if they litigated the claim in tort system with this information.

Frankly, given what we have here, if they provide this information, none of the claimants would wind up opting for litigation, because their expected outcome having provided the information, is less than what they would get under the expedited or the individual review.

We then assign the individuals to whichever these categories gave them the most money. Most of them would take the expedited review. A small number would take the individual review. Those tend to be individuals who, by want of their title, their occupation would put them into one of the lower contact group. But their activity tends to put them in terms of having more contact exposure than you would expect.

So those are exactly the kind of individuals that you would expect to see for individual review. That is -- well, they're individuals because of the way the contact group maximum amounts are set would initially be scheduled lower amounts, because most of the people in those groups would not have the kind of contact.

But occasionally there are individuals within those groups, because of what they're doing, they describe themself as a laborer, for example. Then when they write down what they did, they actually worked -- as a laborer, they spent a lot of time picking up gasket material, so...

Q. So what was your -- what is your estimate of the payments for current mesothelioma claimants?

A. We estimate that the payment, individual claimant again to be about $60 million. Each one was evaluated -- the way we did the aggregate analysis, we valuated the individual claims based on the characteristics under the three options and picked the one that was the most. And 97 percent of the claims of the vast by taking the expedited review, which shouldn't be too surprising, since 95 percent of the claimants that we get, 96 percent of the claimants in the 2000s that got paid, essentially have no prospects of liability -- no liability likelihood for Garlock.

Q. Okay.

A. And the model essentially has -- essentially takes

account of claimant characteristics which would correlate with liability, and hence higher -- those would have the best claims would get the highest settlement amounts.

Q. Turning to Slide 76, could you describe your estimated payments to future mesothelioma claims?

A. Right. So, again, we use the -- as we describe, we use the two and a half percent inflation rate on the settlement amounts. Gives us the total nominal value of $260 million, using the 3 percent real discount rate, gives you -- less than $160 million net present value.

Again, we use the estimated expected offers under the three options for each age in the contact group combination.

Again, because -- again, we don't have the individual claimant characteristics for those. More of them are actually going to go in the direction -- the estimate is going to give you more in the individual review than -- excuse me, the expedited review than the individual because we don't have the diversity of claimant characteristics estimated with them.

But I think that -- so the optimal choice is about 99 percent of future claimants would take the expedited review.

Q. Okay. Slide 77 is a summary table?

A. Yes, sir.

Q. Would you describe, then summarize your conclusions regarding settlement payments by contact group for current and

future claims?

A. So, as we described, this part of the table right here shows you the settlement amounts that -- the maximum settlement offer that's assigned for each one of the five contact groups that we have, plus the individual review.

We're going to summarize across those groups, get a total for those.

We have, essentially this shows the calculation of what we got. Within the first contact group we estimate that there will be settlements that are approximately $100 million. They represent about -- just slightly under half of payments, and they would be an average of around $49,000.

Each one of these numbers describes what each one of those are. And we have an amount here of $1,000 for each one of the group five claimants. Essentially there's an amount that you can get simply by being in that group.

We have the individual review amounts here which we've estimated as being for the -- about 1 percent of the total overall. It only comes to about $2 million in total net value -- present value calculations. And it has an average here of 16,000. You'll note that that number is a lot less than the numbers up here.

That's because most of the claimants for this group, essentially are individual review claimants that would come out of here, because the individual review -- the amounts

here -- these are appropriate for most of the individuals within this category. But there are rarely individuals -- occasionally individuals who by want of their -- by nature of their occupations, their job duties instead of their occupation description which would put them in here, should -- would be entitled to getting more and they would be the ones who tended to go with the individual review.

The overall average is approximately $20,000, significantly above the amount that we have in the period of 1990s, somewhat below the most recent settlement average resolution amounts in Garlock's -- certainly less than the average payment amounts in the recent history. But we're talking about a very different value environment -- information environment here.

In total, this column adds up to $214 million in net present value terms. The funding of the plan is $270 million. That leaves approximately $56 million for contingency and trust administration.

By contingency I mean the fact that for the individual review here, we have a small number of cases. We are not predicting any to go through litigation. We expect under this plan that would be extremely rare that would occur.

For the reasons that I describe in terms of valuing the future claims with regard to individual review, it's quite possible by the nature of the individual claim characteristics

that future claims would have more variation to them, and there would be more individuals in here.

I wouldn't expect that to happen much, given the history with the pending claims pool, but this amount should be more than sufficient to cover that. Even counting for somewhere in the neighborhood 10 to 15 percent -- 5 to 10 percent in terms of trust administration costs, which would give you the total of the $270 million.

Q. So what's your basis for describing the 5 to 10 percent trust administration costs?

A. That's -- I don't have a detailed understanding of that. Basically we have just reports what trust administration costs are from publicly available trusts.

Q. Okay. How does your estimate of payments under the plan relate to your liability estimate and your financial statement estimate?

A. So it fits in here in this perspective relative to what we did before. It's $270 million net present value. It's significantly above the liability amount -- multiples of the liability. It's above the amount that you would expect to get out of settlements where the plaintiffs are avowing their exposures to asbestos products that they did in 1990s. Here they're providing that information without -- without actually describing it in a litigation setting.

But it doesn't cost Garlock to get the information in the

same way it does in the current tort environment, so that means the amount should be -- is and should be materially below the financial reporting range. That's what we've illustrated on this chart.

MR. CASSADA: May I have a --

THE COURT: Yes.

MR. CASSADA: -- few moments?

THE COURT: Sure.

MR. CASSADA: I also have a number of documents that I want to introduce.

THE COURT: Okay.

(Pause.)

BY MR. CASSADA:

Q. Dr. Bates, I want to back you up to the discussion that we had earlier about incidence, the future incidence that you projected under the plan, and the basis for your projected claimants by year.

A. Okay.

Q. Describe how you determined that -- here we're looking at Slide 58. In focusing on the year 2011, how many claims do you project would actually have access to a trial in that year?

A. Have access to a trial?

Q. How many claimants do you project would have contact -- would establish or alleged contact with a Garlock -- Garlock's

products during the year taking 2011, for example?
A. So, I'm sorry. You're asking the question of how many -- how do I come up with that number?
Q. Yes. Precisely.
A. All right. So the year here 2010 is low. I thought maybe you were asking that question.
Q. That's a partial year.
A. That's because that's a partial year, so that's not what you're asking.
Q. That's why I focused on 2011.
A. So what we have from the prior chart is, we have total incidence of disease for -- expected disease for each one of the contact groups.

Within the PIQ data, we received information about the individuals who assert contact with each one of Garlock products. That gave us percentage of total claimants within that contact group who asserted contact with the product.

So, for example, in claimant group number one, the number may be 62 percent. I don't have the number at the tip of my finger, it's in my report. But that gives us essentially 62 percent of individuals in the PIQ population.

We then took that percentage and applied it to the annual amount in this figure here. So the amount that you would get in 2011, that would be associated with that contact group. And so if we had, you know, 1,000 people in that group, and

then we took 62 percent of them, we have 620 people.
Q. Thank you. Now, you were talking about your estimate of the number of other parties whose products would be identified in the typical claim against Garlock. Do you recall that --
A. Yes.
Q. -- the 22 --
A. Yes.
Q. -- and 14. Would you describe where you obtained that information?
A. Well --
Q. Or clarify that?
A. Clarify?
Q. Yes.
A. I thought I had described it. So somebody thinks I missed something, so...

Well, there was a -- we have a claim file review that we did. All right. As well as we have PIQ information, and claim files that were provided to us and interrogatory responses. And within those, we essentially created what we called product sample. So it's claimants who were within our product's review sample.

So these are essentially files which we believe to be essentially correct from -- with regard to depositions, interrogatories responses, and essentially the claim file review that went on was looking for people who -- claimants

who would identify both their products, the types of products that they were exposed to, as well as either the brand or the company name.

So for example, we could say insulation by Owens Corning or they could say Kaylo, and we would know it was the same thing.

But it's important they asserted contact with the product which they could identify.

Q. Okay. Did you -- the source of that data, did you make any determination with respect to whether that was -- data was representative of claimants against Garlock?

A. Well, I did, to the extent that I could within the data that I have.

I mean, at one level it's likely to be unrepresentative in that it's likely to be more high-quality claims against Garlock, because it's -- you know, those are the ones that are more likely to have the complete claims.

It does come out of the PIQ provided data as well. So there were court-ordered samples of claim review files as well. So those have less likely to that susceptible to that means.

I then compared that as well with the information that I have historically from -- not fully recalling the full way -- I did this. I remember the exercise, as I do the details of it. Comparing the number of claimants there, the relative age

of the claimants, the number of exposures -- excuse me, the number of parties that they would name, and so on. They appeared to be from the characteristics I could name -- could identify to be similar in characteristics to one for which I didn't have that information. So I was, for the purpose of this, for those qualifications, satisfied with it being representative.

Moreover it's numbers that are considerably less than I believe to be the exposure in fact, and considerably less than the number of parties that are actually named. So that if there was in fact a more exhaustive discovery that was done for the individuals, and we actually bring in information like what their site exposure and their work history was, the kind of analysis that we talked about could be done, I would expect that number to actually go up if you knew more about the individual and did a more exhaustive search.

So, for example, if the plaintiffs themselves were deciding to move the litigation on to a new defendant and was doing more work in that area, I suspect that that would affect -- they would identify -- be able to identify more of these exposures. In fact, along the process that they've done over the last 30, 40 years in coming up with the names of some of the litigants and the defendants that they have at this point.

Q. Now you were able to establish the typical claimant would

identify contact with 36 claims.

How does that relate to the litigation experience that you've described to some extent talking about the information regimes and the difficulty getting claims information and the problems described by Mr. Magee and Mr. Turlik?

A. Well, that's the result of a more strategic behavior on the part of the plaintiffs. If you actually look at the plaintiffs -- or in this case it helps to consider the plaintiff's law firm itself. You can in fact get more money, as I describe in the report, by targeting at individuals -- targeting individual defendants, than you can by essentially trying to go after multiple defendants.

So it would cost more for the plaintiff's law firm to develop a case against multiple defendants. It would -- and at the same time it would dilute the case. It would lower the likelihood of them getting trial outcome. Because in fact they are making the case for some of the defendants themselves when they point the finger -- the plaintiff himself points the finger at first one set of defendants then another set of defendants. That raises the prospect of it being sort of more confusing to a jury about who the potential target are -- what the potential source is.

You can have a number of defendants each saying, well look, he admitted exposure to them, it's them. The other one saying no, it's them. They may both get assigned, or may

neither get assigned. But it makes for a more confusing and more complicated process.

So I think it's their approach is as they have described when they say it's the defendant's job in cases like this to do the work of finding what the alternative exposures are. Their job to do the job of finding the exposures to the company they're suing. I think it's in their interest to target the litigation in that way.

You know, with regard to what I'm talking about here, in terms of dividing it up with the relationship between that versus my calculation of say 36 parties is, think about that process actually taking place with a random draw from each of those 36.

So, you know, we're going to target them, but we aren't going to target everybody. I mean, it's obviously not the case if you target your litigation against one party, and because of your strategic targeting you can get that party to be responsible for 50 percent, and then do that for each one of 36 parties. It's not that you have 18 times the liability in that. You have to take count of the likelihood that they're targeted in that circumstance.

So, whether you do the calculation the one way or the other, both of them leads you to the overall conclusion that, you know, to the way I've done it, which is to treat the parties all symmetrically with regard to the litigation.

That's to put them in the same relative position so that they aren't biased, vis-a-vis their position within the litigation for the calculation of the liability, which is a legal responsibility concept, which therefore I think that's appropriate. I think that's the right way to do it.

MR. CASSADA: Your Honor, I have some exhibits. May I approach the witness?

THE COURT: Yes.

BY MR. CASSADA:

Q. I'm going to get you to identify those. You have -- I've handed you, Dr. Bates, a number of exhibits.

Can you first, identifying the exhibit number, identify each exhibit.

In other words, identify each exhibit by exhibit number.

A. Just making sure I'm identifying the specific thing, I want to make sure I know what it is. Yes. Okay.

So Exhibit No. GST-992, if I read this right, is the paper we referenced in my report and I made reference to earlier today, "An Economic Approach to Legal Procedure and the Judicial Administration", by Richard A. Posner.

Exhibit GST-993, titled, "Selection of Disputes for Litigation". By George L. Priest and Benjamin Klein. Another paper that I referenced in my direct testimony here today, a paper dated from 1984.

Exhibit No. GST-1274. This is the 1996 paper by Lucian

Bebchuk -- B-E-B-C-H-U-K, that I referred to in my presentation earlier today.

Exhibit No. GST-1320, I hope that's a zero, is the paper by Rosenberg and Shavell -- S-H-A-V-E-L-L -- from 1986 -- '85, excuse me, that I referred to earlier today.

Exhibit GST-996 is a copy of my affirmative report in this matter. I would like to point out that on pages -- in the appendix on pages 130, 131, 132, somehow the wonders of Microsoft Word have duplicated some of the lines of the table repeatedly. I think it's in the way it was actually produced originally, so just make sure to note that within the report.

GST-1000. This is the expert report of Jeffrey F. Brown, dated February 15th, 2013, referenced in my presentation here today.

Q. And you talked about that during your testimony today and you mention it in your report?

A. Correct, in both.

And finally, if this is the last one, is document GST-1305. It is the memorandum that I received from Robinson, Bradshaw and Hinson dated February 5th, 2013, regarding the apportionment of damages in asbestos cases in 50 states, the District of Columbia and under Admiralty Law. It's what I used and made reference to here today in talking about apportionment of the states made reference to in my work and in my report.

MR. CASSADA: Your Honor, we move admission of those exhibits, that's GST-992, 993, 1274, 1320, 996, 1000, and 1305.

MR. INSELBUCH: Your Honor, with respect to the first four, these are articles that appear in publications. We have no problem with the debtor supplying the copies of these for your convenience, but they really are not evidentiary matters and shouldn't be accepted into evidence.

THE COURT: Well, I'll admit them for what they are. They are articles.

MR. INSELBUCH: The next exhibit is GST-996, which is Dr. Bates' report. We would urge that that be accepted under the basis we previously accepted other reports --

THE COURT: We'll do that on the basis.

MR. INSELBUCH: -- that also with respect to the report of Jeffrey Brown.

A. Yes.

MR. CASSADA: We move both of those for demonstrative and Rule 104 purposes.

THE COURT: All right.

MR. INSELBUCH: Now, GST-1305 is a memorandum from Robinson, Bradshaw to Mr. Bates. This we object to. This is material that if they want to write a brief, they can do that, but he shouldn't be a vehicle for debtors' counsel supplying you with evidence.

THE COURT: I'll admit it, understanding what it is. And it's something that he looked at and relied on.

MR. CASSADA: And just for purposes of clarifying the record, Exhibit 1305, Dr. Bates, is that something you relied on in connection with your report and opinions in this case?

THE WITNESS: Yes.

MR. INSELBUCH: The mere fact that he relied on something doesn't put it into evidence.

MR. CASSADA: I understand.

THE COURT: But we'll have it so you-all will have and we'll all have what he looked at.

MR. CASSADA: Your Honor, we have on our list documents that have been filed in the court, and that's Garlock's Proposed Plan of Reorganization and Proposed Claims Resolution Procedures, which Dr. Bates had reviewed and evaluated. And I don't have those numbers right now, but we move to admit those.

THE COURT: That's all right. We'll accept those as being documents that are in the case file.

MR. CASSADA: And finally, Your Honor, we're going to offer for demonstrative purposes the PowerPoint presentation that Dr. Bates used during his testimony today. And that would be demonstrative Exhibit GST-805 (sic).

MR. INSELBUCH: We have no objection to that if we

could have it by 7:00 tonight.

MR. CASSADA: You'll have it. I'm sorry 8005.

THE COURT: Okay.

(Debtors' Exhibit No. 8005 was received into evidence.)

MR. CASSADA: Then I've marked as GST-8006, demonstrative exhibit, Dr. Bates' drawing today when he was showing the settlement process and the interaction of the likelihood --

THE COURT: Okay.

MR. INSELBUCH: We don't need a copy of that.

THE COURT: Okay.

MR. CASSADA: I'll mark that as Exhibit 8006.

(Debtors' Exhibits No. 992, 993, 996, 1000, 1274, 1305, 1320 and 8006 were received into evidence.)

MR. CASSADA: Thank you, Your Honor. We pass the witness.

THE COURT: All right. I think Monday would be a good time to pick up the pass.

MR. INSELBUCH: Could we talk a little bit about scheduling?

THE COURT: Yeah. Let me just say what seems to me we ought to continue with Dr. Bates, and then what you said you-all had to finish Mr. Magee and that be your case. Let's try to do that Monday.

MR. SWETT: Your Honor.

THE COURT: Yes, sir.

MR. SWETT: We have one witness, who at last report can only be here on Monday.

THE COURT: Okay.

MR. SWETT: It will probably be a matter of two hours, two and a half hour examination. So I won't do this if we don't have to, but I may need to ask Mr. Cassada for an accommodation in presenting that witness on Monday afternoon.

THE COURT: In that case we'll just slip Mr. Magee, I guess, till Tuesday and let you-all finish. I'm not sure if you've been counting the days.

MR. SWETT: They are dwindling.

THE COURT: We will give you all the days that you're entitled to. We'll pick up and do those and do -- for rebuttal give Garlock what time's left; understanding that we really have the flexibility only to lop over into Monday of next week.

MR. SWETT: Your Honor, did I understand you earlier to say that you were tied up on the Monday following the third week; is that correct?

THE COURT: We can move that, I discovered at lunch. We had scheduled some other hearings, because that was --

MR. SWETT: Before we lock that in concrete, I need to consult with my science lawyers who are dispersed around

the country.

THE COURT: Okay.

MR. SWETT: But I can confirm that to you on Monday.

THE COURT: Okay. That would be my preference to go ahead and finish, rather than break for a week or two or whatever it has to be and then come back. I think that would be a bad thing to have to do. So hopefully they'll be able to come back.

MR. SWETT: That last issue would be in previous discussions, Mr. Clodfelter wanted to bring Dr. Heckman (phonetic) and Dr. Peterson was to be provided an opportunity to respond to whatever criticisms were leveled at him in rebuttal. And we would ask for that privilege. We might not -- might waive it depending upon what the rebuttal was.

THE COURT: Okay. We'll do the best we can. You all --

MR. GUY: We have the same issue.

THE COURT: We'll try to give everybody all the time they're entitled to, all the time you need. Remembering in a trial practice seminar somebody said never ask a question more than eight words in it, and we might have to invoke that and an eight-word answer. But we'll try to get this in.

THE WITNESS: Sorry, Your Honor.

THE COURT: At any rate, well -- we'll do the best we can.

MR. CASSADA: Your Honor, it does appear that we're running out of days, and we have witnesses -- I suppose what we'll do is we'll submit expert reports for witnesses we don't have an opportunity to call and summaries of testimony that we would have offered.

THE COURT: We may just have to have you do a proffer and a proffer of a rebuttal or whatever you want to do.

MR. SWETT: But in the absence of cross-examination, it would not be proper to receive those into evidence.

THE COURT: I'm not going to consider them, we'll put them there and it will be part of the record for somebody else to look at.

MR. CASSADA: We had the other kind of lingering issue that you had reserved an opportunity for the committee and the FCR to file *Daubert* motions.

THE COURT: We'll let them do that after the close of evidence.

MR. CASSADA: You may recall that you had mentioned giving us an opportunity to offer affidavits to cure any problems that we could have addressed had we had those motions beforehand.

THE COURT: Yeah. Okay.

MR. SWETT: Finally, Your Honor, I've been asked by the science lawyers to press the question of what the reduced

roster of science witnesses that they ought to prepare for. And I understood that that information would be available sometime before now. But certainly would like to have that this evening.

THE COURT: All right.

MR. CASSADA: That -- I think we can provide a preliminary number there. That is going to depend on how much time we have for rebuttal, which is somewhat up in the air. But we'll have to prioritize the witnesses that we'll call and I believe we can give notice of those --

THE COURT: I'll ask you to do that, and do that as quickly as you can.

MR. CASSADA: Okay.

THE COURT: Okay.

MR. CASSADA: Thank you, Your Honor.

THE COURT: All right.

MR. CASSADA: Have a nice weekend.

(The court was in recess for the day at 5:35 p.m.)

* * * * * *

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NORTH CAROLINA
CERTIFICATE OF REPORTER

I, Laura Andersen, Official Court Reporter, certify that the foregoing transcript is a true and correct transcript of the proceedings taken and transcribed by me to the best of my ability.

Dated this the 3rd day of August, 2013.

s/Laura Andersen
Laura Andersen, RMR
Official Court Reporter